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Commission on Maine's Future

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FINAL REPORT

December 1, 1977

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Commission on Maine's Future

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Acknowledgements

It would be impossible to acknowledge separately each individual who has given assistance to the commission through these past months. They are listed, however, in Appendix B and to each goes the sincere gratitude of every member of the commission. This is really their report, since without their generous contribution of time and knowledge, no report would have been possible.

The commission also extends its heartfelt thanks to the individuals who have, from time to time, comprised its staff — Joan Hazzard, Carol Majdalany, Dick Sherwood, Chuck Roundy, Galen Rose, Cathy Thompson, Tullio Nieman, and Dick Fallon. Particular thanks, however, go to Joan Hazzard, who has worked with the commission from its creation to the present day and through many periods of discouragement and heavy pressure. Sincere thanks go also to Carol Majdalany whose hard work and dedication to the commission have helped to make this report possible.

Thanks are also due to Allen Pease for his strong and encouraging support, to the many members of the State Planning Office Staff, and to the many state departments and agencies, all of whom have been so cooperative and helpful. Our special thanks also go to all the Maine citizens who contributed their thoughts and comments and demonstrated their sincere concern for the future of their state.

The preparation of this report was financially aided by a comprehensive planning grant from the U.S. Department of Housing and Urban Development.

Credits

Photographs on pages 12, 23, 27, 31, 35, 38, 46, 58, 66, 72, 79 and 84 by Tom Jones. Photographs on pages 52 and 88 by Kosti Ruohomaa. Publication designed by Phoebe McGuire, Technical Services Division, Maine State Planning Office.

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Preface

"... Dirigo, I direct, or I guide
As the Polar Star has been considered the mariners' **guide** *&* **director** *in conducting the ship over the pathless ocean to the desired haven & as the centre of magnetic attraction; as it has been figuratively used to denote the point to which all affections turn & as it here is intended to represent the citizens'* **guide** *&* **the object,** *to which the patriots best exertions should be directed...".*

The words above were written one hundred and fifty-seven years ago by a joint legislative committee charged with designing the State of Maine seal; the motto chosen is as appropriate today as in 1820.

During the intervening years, Maine achieved a period of great prosperity. Its ships and the seamanship of its sailors earned the respect of the world by their mastery of its seas. Nations south of the equator depended on its shipments of ice; its lumber and granite built cities. The independent spirit, the integrity, the dedication to hard work, the ingenuity, the common sense of its citizens were an inspiration to all people.

These strong characteristics of Mainers were born of a hardscrabble existence: the clearing and cultivating of boulder-strewn and thinly topsoiled fields, the bitter cold weather and rough seas of North Atlantic fishing, the rough and tumble life in Maine forests. It was an existence which demanded commitment to survival and spawned self-reliance.

Although subsequent events, labelled "progress" caused Maine's economy to fall behind when compared with other areas of the nation, they never dimmed the determination or compromised the integrity of its people.

Suddenly, Maine has become a symbol — a reminder that people can still enjoy a quality of life which satisfies basic human needs, a place where business can still be done on a handshake, a place where each human being is respected for appreciating and adhering to individual values which may, at times, seem to differ from the national norm.

Maine has not been by-passed. It has remained as an anchor for human values which really count. True, it is not overburdened by warm weather, a plenitude of jobs, or so-called "sophisticated pleasures". It remains what it always has been, a state of mind, a state of people who know what makes life most worth living, a state which continues to be heard from, a state which will once again enjoy prosperity.

Members of the Commission on Maine's Future believe that Maine is, more than ever, in a position to lead and guide.

In these times of accelerated change and rising pressures, our nation needs an anchor to windward, an example of leadership born of time-tested values. Maine is in a unique position to provide that leadership. To do so, Maine people must rekindle their belief in themselves, continue to hold high standards of integrity and hard work, and set an example that proves anything can be accomplished when there is the will and the determination to do so.

We hope that readers will share the commission's optimism and conviction that the State of Maine has a positive future.

Introduction

Maine.

It's the state first warmed by the rising sun as it breaks the dawn of a new day. It's the place where the beauty of the pounding surf is surpassed only by the blue-green waters of the harbors that dot its jagged coastline.

It's a place of vast forests, towering mountains, rolling hills, sparkling lakes, and green valleys. It's one of the last places along the eastern seaboard where one can find solitude on a forest trail or walk for miles along the salt-sprayed shore with only the gulls for companions.

Despite its vast area and predominantly rural character, Maine has not completely escaped the problems associated with a highly mobile and urbanized society — the traffic snarls, urban sprawl, pollution, and other problems which result from unplanned or excessive growth.

In many areas of rural Maine, small, sleepy villages, unchanged for many decades, are beginning to feel the pressures of growth for the first time.

Through much of Maine's history, city and town growth was gradual. A new store was built on some suitable corner, a new depot was built for the railroad, and houses were built here or there almost at random. The growth came almost unnoticed, and such gradual growth was welcomed by the community.

But then came proposals for major shopping centers, large subdivisions, and manufacturing establishments. Often these proposals were predicated on the availability of large tracts of farmland or woodlots conveniently located adjacent to new roads.

The winding wagon paths were replaced by straighter, hard-surfaced roads as automobiles increased in popularity. As cars became heavier and faster, bigger and better highways were built. This improved transportation network provided greater impetus to expand business and industry.

More people took advantage of the opportunities these improvements provided. In turn, they encouraged further expansion and growth. In a state like Maine, which has never had sufficient jobs for its people, it is understandable that any growth would seem to be for the best. After all, more people were bringing more business, which, in turn, would mean work and an enlarged tax base.

But growth can bring more problems as well as more benefits, as many Maine towns are now discovering. While new people can mean more tax revenues to a town, they also can mean added pressures for spending tax dollars. Schools must be expanded to accommodate additional children. Water and sewer line extensions may be needed. Demands may increase for more police and fire protection. More tax dollars may have to be spent to provide services people may expect.

In recent years, Maine people have become more aware of the problems of unplanned growth. Few people are unalterably opposed to any kind of growth. But fewer still would advocate that growth and development of the state be totally free and uncontrolled.

A new industry may provide sorely needed jobs, but should it be located on the best parcel of farmland left in town? Should the demand for more housing be translated into ten, six-unit apartments on the outskirts of town, or would it be better located on water and sewage lines within the city limits?

As in any state, diverse interests and occupations characterize Maine people, and the desires and needs of individuals and groups often conflict. Some feel Maine needs many new plants to provide new jobs. Others feel just the opposite: the state should return to a more simple era when most of the residents got along sufficiently with what they could take from the land and the sea. There are those who say every person should be able to aspire to his or her own, privately owned, single-family home. Others say that this is an age of scarce resources and that single-family housing is becoming unrealistic and that Maine should be looking to more and more multi-family housing.

The Maine legislature is no stranger to these conflicts. Each session finds frequent debates over what Maine is, what it should be, could be, or ought to be.

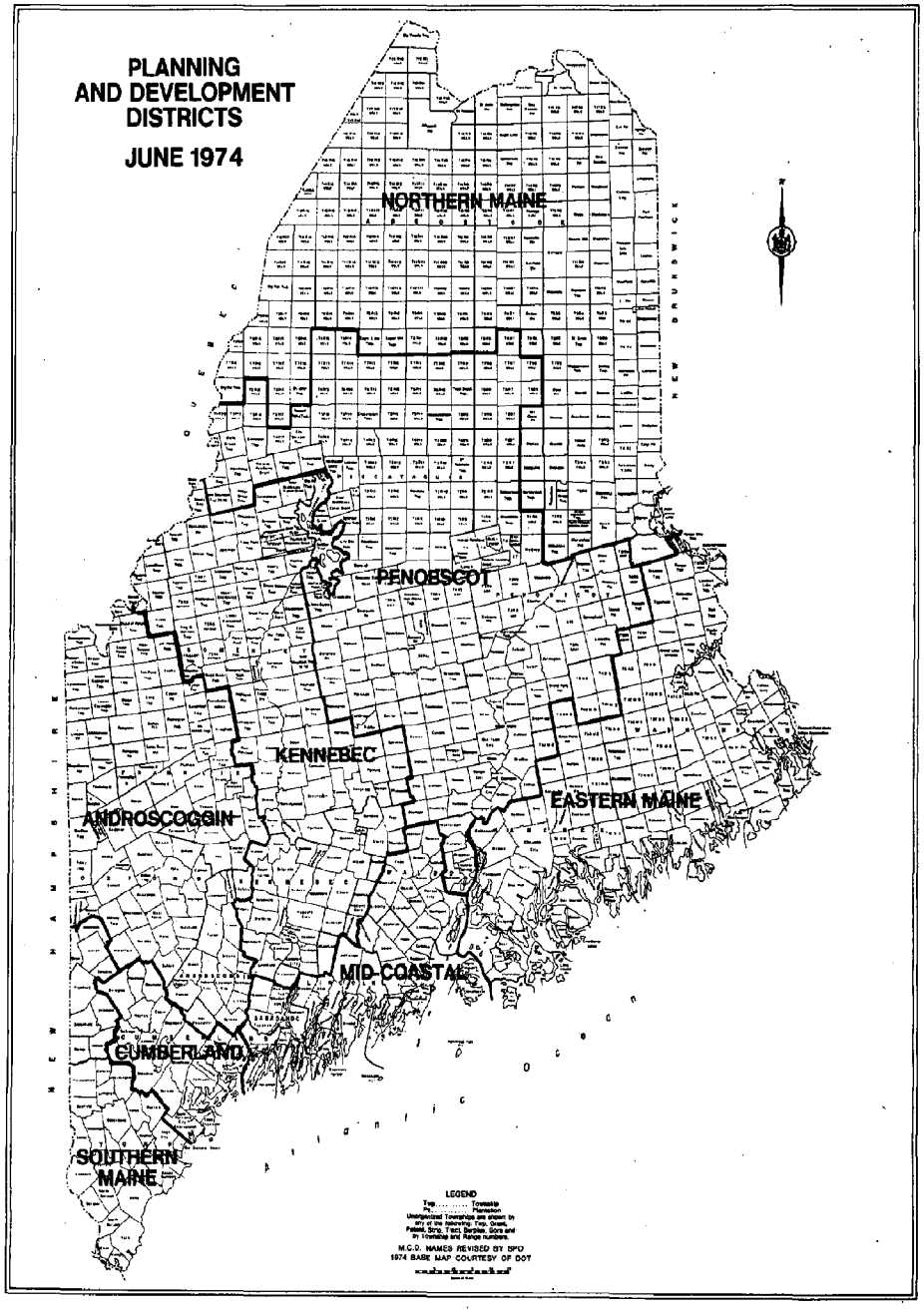
Are there answers definitive or tentative? Can Maine, as a whole, be assessed for what it is today and what it might become? Can a plan be worked out to guide Maine towards where it might like to be in 25 years? If so, who should devise such a plan?

The 106th Legislature believed the state should at least try to answer some of these questions and make some attempt to map out some tentative course the state might follow in the future.

The legislators thus approved Legislative Document (LD) 2528, "An Act Establishing a Commission on Maine's Future". This is the final report of that commission.

Those searching for THE SOLUTION to the state's problems will not find it here. There is no panacea, no miracle cure, no simple and obvious answer to the many complex problems which beset the state. If there were such a thing, Maine people would have discovered it long ago, and there would be no need for a commission such as this.

The reader will find, we hope, a close examination of the state as it is, an expression of what Maine people themselves hope to see it become, and some definite recommendations as to how the state might realize those hopes and aspirations.


PLANNING
AND DEVELOPMENT
DISTRICTS
JUNE 1974
NORTHERN MAINE
PENOBSCOT
KENNEBEC
ANDROSCOGGIN
EASTERN MAINE
MID-COASTAL
CUMBERLAND
SOUTHERN
MAINE
QUEBEC
NEW BRUNSWICK
NEW HAMPSHIRE
LEGEND
M.G.D. NAMES REVISED BY SPO
1974 BASE MAP COURTESY OF DOT

Background of Commission

In the closing hours of the first special session of the 106th Legislature, a bill, Legislative Document 2528, sponsored by Representative Richard Morton of Farmington, entitled "An Act Establishing a Commission On Maine's Future", was enacted and signed into law by Governor Kenneth Curtis.

It was indeed a significant piece of legislation, since it represented the first legislatively mandated attempt at long-range planning for the state by its citizens and legislators in partnership.

The commission created was to consist of 40 members, 27 of whom were to be appointed by the governor and apportioned among the planning and development districts according to the relative population shares of those districts to the total population of the state. However, no planning and development district was to have less than two representatives and no county less than one.

The remaining 13 were to be comprised of the director of the State Planning Office, six senators to be chosen by the Senate President, and six representatives designated by the Speaker of the House. The legislators were to be representative of both the majority and minority of their respective bodies in approximately the same proportion represented by their parties in the Senate and House.

The effective date of the act was to be January 1, 1975, and the commission would have a legislative lifetime until June 30, 1977. Because the work of the commission would be accomplished during his successor's term of office, Governor Curtis chose to leave selection of the commission membership to the new governor. Consequently, Governor James B. Longley appointed the commission on March 7, 1975, and its first meeting was called to order in the Senate chambers on April 7, 1975.

Subsequently, acknowledging that it was not possible for the commission to begin its work in January, Representative Morton, with concurrence of the governor, President of the Senate, Joseph Sewall, and Speaker of the House, John Martin, introduced emergency legislation, LD 2104, in the first special session of the 107th Legislature. This act extended the life of the commission to November 1, 1977, and allowed all funds appropriated in a previous fiscal year to be carried over. This legislation also required a preliminary draft of the commission's formal final report be submitted to the governor, legislature, and people of Maine not later than June 30, 1977.

The original charge to the commission required the commission to prepare for consideration of the governor, legislature, and people of Maine:

1. *A proposed growth and development policy for the State of Maine and*

recommendations concerning means of most effectively implementing such policy;

2. Reports assembling, analyzing and projecting relevant information regarding the future of the State including, but not limited to:

A. State-wide and regional demographic information on growth, interstate and intrastate migration patterns, age distribution and dependency ratios as factors in the cultural, social and economic life of the State;

B. Availability of various natural resources including energy and an analysis of their importance to, and effect upon, the cultural, social and economic life of the State; and

C. A description of the future of the State as envisioned by Maine people.

3. An examination of long-range plans by state departments and agencies, including the University of Maine and an assessment of their possible impact on state growth and development;

4. Reports on the implications of major state decisions;

5. An interim report on commission activities to be submitted not later than November 30, 1976;

6. A formal final report on commission activities to be submitted not later than June 30, 1977. (changed subsequently to November 1, 1977).

To accomplish these requirements, the statute provided as follows:

There is created and established a Commission on Maine's Future, hereinafter in this chapter referred to as "the commission". It shall be the responsibility of the commission to recommend a desirable and feasib e description of the state's future based upon comprehensive analysis of factual information and projections pertinent to such a description. The commission may use the technical expertise of the State Planning Office to construct models and identify parameters to be used in determining the best long-range goals of the State. These findings shall be articulated into a working document. The commission shall meet at least twice annually.

In the performance of the above duties, the commission may hold public hearings and conferences with any person, persons, organizations and governmental agencies concerned with Maine's future.

The commission shall be provided information, reports or other assistance

from any agency, department, legislative committee or other instrumentality of the State, with the consent of the head of the respective organization. State agencies shall, on request, assist the commission in carrying out the purposes of this chapter.

Methodology

Before it could think about the future, the commission first had to learn all it could about the state's present and past. It began with the people.

Who lives in Maine today? How many are natives? How many have moved to the state recently? Why have thousands moved into Maine while thousands of others, particularly the young, have moved out? How many of Maine's people are working? How many are unemployed and why? What are the lifestyles most preferred by Maine people and what sort of future life do they see in Maine for themselves and their children?

The commission wanted to know also about Maine's natural resources. What are the resources in Maine? How does the state benefit from them? Are there ways the state could develop its natural resources to provide greater benefits to its citizens? Are there ways to use the resources for maximum benefit while ensuring their continued availability?

The commission focused on other broad areas of concern. It considered energy use as it is today and estimated needs in the future. It explored the state's existing transportation needs and considered ways to meet transportation demands 20 to 30 years hence.

It inquired into education, health services, housing, capital spending needs, social services, and various governmental structures.

The commission met monthly as an entire body and sub-committees held additional sessions to work on broad subject areas, such as economics, the environment, social services, and government.

More than 150 experts in 60 different fields were invited to share their knowledge and views with the commission members. Much correspondence was received and considered. Individual commission members sought opinions from hundreds of Maine citizens throughout the state.

Six "Futures Days" were held in six counties during the past two years. These days were designated as public forums where all interested citizens could express their desires and aspirations for the state. The commission members spoke before service clubs and other community organizations throughout the state. Such speaking engagements not only kept the public informed about the commission's work, they also allowed the commission to share with Maine people the information they were compiling on Maine and her problems. Most importantly, these meetings and talks allowed Maine people a continuing opportunity to share their views with the commission.

By June 30, 1977, the commission was ready to present a preliminary report. The major areas of concern had already assumed some form and structure.

Shortly after the preliminary report was published, the commission released

a slide show entitled, "Maine 2000: Can We Get There From Here?". It was the commission's goal to show the presentation in 100 Maine towns during the summer of 1977 to inform Maine citizens of problems and trends they would have to face as we approach the end of this century. But, more importantly, the commission wanted to elicit public response to some of the recommendations they were considering for inclusion in the final report.

The commission visited 94 towns, and the slide presentation was shown 142 times. In addition, "Maine 2000" was shown by both public and commercial television stations in Maine.

The commission received over 1,700 completed questionnaires from Maine citizens. Beside indicating their agreement or disagreement with potential solutions to problems, the citizens also had the opportunity to make additional comments of their own about any issue of concern. (THESE CITIZEN COMMENTS PROVIDE A VALUABLE INSIGHT INTO THE CONCERNS OF MAINE CITIZENS, AND A LARGE CROSS-SECTION OF THESE COMMENTS APPEAR IN THE LEFT-HAND PAGES OF THE CHAPTERS WHICH FOLLOW ON THE COMMISSION'S BROAD POLICY GOALS AND SUGGESTED ACTION ALTERNATIVES.)

The summation of the citizen responses to specific proposals or questions is detailed in Appendix A.

The show, "Maine 2000" has not been shelved even though the commission has now completed its final report. It is still available to interested citizen groups and organizations.*

* *Anyone wishing to obtain the use of the show should contact the State Planning Office, 184 State Street, Augusta, Me. 04333. The telephone number is (207) 289-3261.*

Planning: A Primer

There's no great mystery about planning. Everybody does it.

We plan to get up at a certain time of the day. We plan to stop someplace on our way to or from work, to visit a friend, or to run some errands during lunch hour.

These are rough plans to be sure, and perhaps over-simplified. Like all plans, even these are subject to change in the face of unforeseen, unanticipated circumstances which arise. A phone call, some minor crisis at work, these and many other developments can take place forcing us to alter our plans for the day.

There are various levels of planning, some of which are complex and intricate in design. The simplest plans are generally at the personal level as we plan our lives, vacations, or major expenditures.

Many of those who may scoff at the idea of hiring a professional planner for their local community or their state are often excellent planners of their own lives. Businessmen project income and expenses as far into the future as they can; woodsmen plan where to cut pulp and lumber next; fishermen plan how to cope with weather changes, how much bait to carry, how much ice or refrigeration they will need at sea.

Accurate information is crucial at all levels of planning. There will be difficulties with the family budget if the husband and wife each anticipate a different total annual income and are each spending money with differing total budgets in mind.

Planning for a community or state is a great deal more complex. Plans that are made for the long-range future of an entire state must necessarily consider countless alternatives. For example, energy decisions may effect new developments in the area of transportation or agriculture. If the use of the private automobile becomes limited, new housing patterns may develop as people move closer to the jobs and services they need. Energy decisions may affect the availabilty of food or the ease with which manufactured products can be delivered to market. Energy decisions may affect a business decision to relocate or change a manufacturing process and employment patterns may change as a result.

As the commission weighed possible policy recommendations, it had to consider the effect one decision might have on another. And, to complicate matters further, it had to look beyond the state's borders. For although some people might prefer that it were, Maine is not an island. Decisions made here very often have an effect elsewhere. At the same time, decisions made elsewhere in the nation or the world can have enormous impact on Maine.

While Maine has certain resources in abundance, it must look elsewhere for steel and most other metals, for coal, oil, and numerous synthetic or manufactured products.

The state's transportation system is intertwined with regional and national

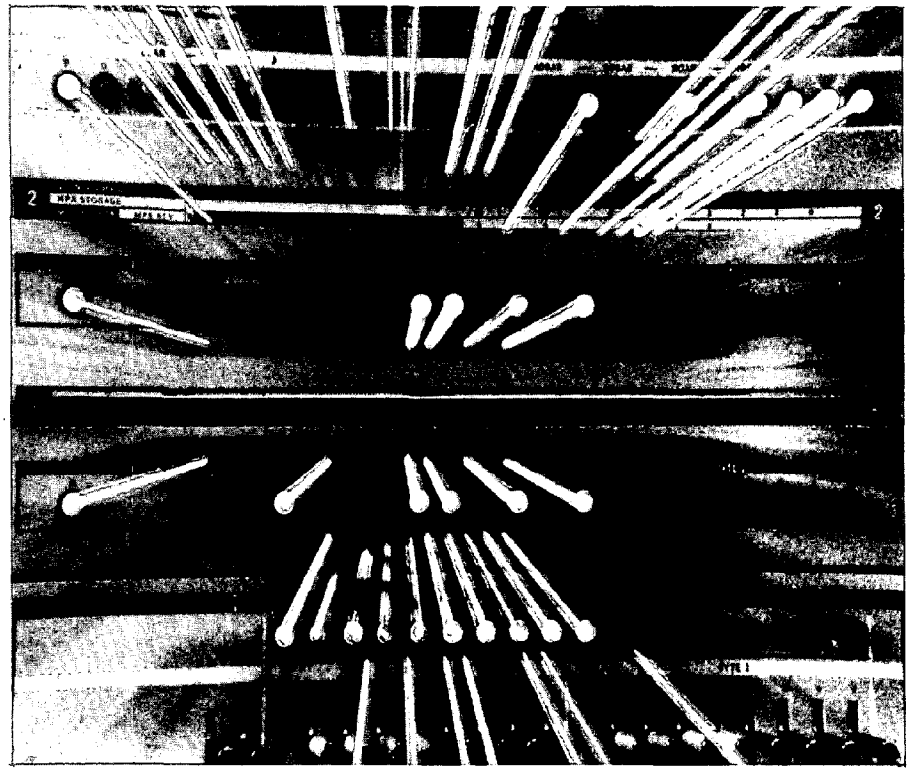
networks, as is its communications systems.

Another factor which complicates consideration of the future is rapidly changing technology. Some technology in use today will likely be obsolete in 20 to 30 years, and technology not yet even considered at this time may predominate. How do you plan for that?

You can't really. But it is possible, nevertheless, to go ahead with a general plan for the state as a whole, knowing full well that some details must necessarily remain vague and uncertain, and that a great number of changes and modifications will have to be made. Further, many possibilities undoubtedly will have been overlooked.

If the Commission on Maine's Future has succeeded only in increasing people's awareness of the need for comprehensive planning for Maine's future and of the complex interrelationships of both problems and solutions, it will have accomplished much. There are no simple or fast solutions or likewise any long-range plan that can survive without constant review, evaluation, and adaptation to changing circumstances.

Data and The Public Policy Institute



The commission believes that two of the more important recommendations which have resulted from its deliberations over the past two years are the ones which call for the support of a centralized data bank, and the establishment of a professional group capable of analyzing the data on a continuing basis. The commission believes that these two recommendations, if implemented, would enable both the public and private sectors to anticipate change within Maine, and thus, make the state more capable of making important management decisions affecting its future.

The accelerating rate of change makes management and planning for a state increasingly complex. There are rarely any easy or simple solutions to any problem. Interrelationships, some obvious and some extraordinarily subtle, between one or more factors have never been more important.

Outside influences are stronger and more pervasive now than ever before.

Almost daily, decisions are made at the federal and regional levels which could, or do, have important effects in Maine.

If Maine is to plan adequately for the future, its leaders must have data that are current, accurate, and usable so they can perceive and evaluate changes occurring within Maine, and anticipate external developments which could have an impact on Maine's future.

The difficulty of achieving access to current, accurate, and comparable data has been the most troublesome and time-consuming task confronting the commission. Some good data exist, but they often are not easily accessible, accurate, current, or able to be compared with data on other issues or concerns. Since many decisions must take into account the varied interrelationships of many factors, comprehensive, comparable data and information are essential ingredients in the decision-making process. The difficulty in gathering data and making it comparable is excessively time-consuming since:

> much of it must be gathered on a town-by-town, department-by-department basis;
>
> recording and reporting systems vary widely among all units and levels of government, state agencies, and local communities;
>
> it is accumulated originally to achieve a single statistical purpose, but without regard to the significant interrelationships between that purpose and others;
>
> the long delay in compilation and publishing often renders it obsolete for current analytic value;
>
> some fundamental data — housing starts, for example — exist on only a local basis.

In many cases, comprehensive, accurate U.S. census data which are compiled only every ten years, are the only source. In the near future, however, census data will be gathered once every five years.

While the initial cost would seem to be significant, and legislation might be required to effect the necessary reporting, the data system could be developed gradually. The availability of such data would go far toward ensuring more informed decisions, beneficial to the state and its citizens.

The commission believes that the establishment and maintenance of a comprehensive data system should be the responsibility of state government, since it already has access to many data sources and can more easily develop a compatible system of recording and reporting such data. Initially, priorities would need to be established regarding the types of data to be collected and stored. Emphasis should be on those data sources which would be most useful in continuously analyzing changing trends in Maine.

By establishing priorities, such a data bank could be developed on a gradual basis over a number of years, thus spreading the cost of such a system to keep the impact on state financial resources to a minumum.

In supporting the development of such a data bank, the commission would strongly caution decision-makers against gathering data for its own sake. Data sources would need to be evaluated as to their utility. In addition, the expense of gathering such data must bear some reasonable relationship to the usefulness. Most important, the privacy of individuals must always be maintained. Finally, we must recognize that there is a very practical limit to the amount of standardized data which could be stored.

Strong support should be given to efforts presently underway in the State Planning Office to create and to implement such a system. The decision-makers should, with professional help, identify the data they believe most essential to their needs. They should establish data priorities and institute mandatory reporting procedures which will ensure the availability of such data on a current basis in the single, central data bank.

The creation of a centralized state data bank, however, will not solve any problems by itself. We must make full use of these data through a continuous in-depth analysis to identify changing trends both in and out of Maine, and to inform the governor, legislature and people of Maine as to what these changing trends mean to the state.

The commission strongly believes that a group of professional persons trained in various academic disciplines should be assembled to analyze the data collected. We have termed this group of professionals the "Public Policy Institute". We believe this could be an "institute without walls", financed by private funds, and administratively and physically separate from state government. Its activities should be under the direction of a single individual with the advice of an on-going citizen commission. Such a Public Policy Institute might be similar to the world-famous Brookings Institute, and could strongly complement the role of the governor, legislature, State Planning Office, and other state agencies in long-range policy and planning decisions.

Rather than create a new state agency or expand an existing one, the commission believes the Public Policy Institute should be distinct and separate from state government. In this way, it will be less susceptible to political influence and administrative changes, and will hopefully provide an objective and continuous analysis essential in the development of any long-range comprehensive plans or decisions. Only through a comprehensive analysis of the many factors affecting Maine life can we continually anticipate the impact of change and remain prepared to meet the challenge of the future.

The numbering system for policies and other recommendations included in this report do not indicate priority or order of importance, and is only intended to assist the reader in referring to specific recommendations.

Commission Policy Recommendation

I. **It be the policy goal of the State of Maine to monitor changing trends continuously and to inform its residents of the nature of such trends.**

Possible Means Of Implementation

1. Examine the feasibility of establishing a centralized data bank to provide decision-makers in the public and private sectors with current, accurate and usable data.

2. Establish a Public Policy Institute to identify long-range trends in society and to spell out the policy implications of those trends. Such an institute, while at least partially funded by state government, should not be a part of state government. It should:

   a. be staffed by professional personnel, including, but not limited to a demographer, economist, sociologist, financial expert, political scientist, etc.;

   b. have the cooperation of state agencies who should work closely with the staff of such an Institute;

   c. report regularly to the governor, legislature, and people of Maine on internal and external trends and influences which currently or potentially affect the state;

   d. conduct, under the advice of an on-going commission, comprised of representatives of the general citizenry and legislature, a continuous, long-range planning effort, and report its recommendations and findings at least annually to the governor, legislature, and people;

   e. evaluate the trends of public expenditure at both federal and state levels;

   f. continuously re-evaluate the roles, functions, and goals of state government, and make recommendations in light of changing conditions and needs.

The Changing Population

The character of any state, the structure and functions of its government, the breadth and variety of services provided, the strength and vitality of its economy are determined by the people who reside within its borders. With the changes that are now taking place in the size and composition of Maine's population, Maine's government must be better informed than it presently is regarding who lives in Maine. The need for such knowledge will increase. Population trends must be constantly measured and evaluated.

At this time no adequate mechanism exists for accurately monitoring and evaluating these trends. This knowledge is essential for the day-to-day management of the state and for the adequate planning of its future.

The Commission on Maine's Future devoted considerable effort to examining the demographics of Maine, and very quickly perceived that significant changes have been taking place in recent years. Using U.S. census data from 1940 to 1970, it was possible to draw several conclusions regarding demographic trends.

1. While Maine's population was growing, its growth was at a pace significantly below the national rate of growth.

2. Maine's population density (number of persons per square mile) increased, but in 1974 was only 34 persons per square mile as compared with the national average of 60. The commission discovered that in 1970, 70% of Maine's population lived in a corridor 30 miles wide and 250 miles long. This corridor was bounded 15 miles on either side of the Maine Turnpike/Rt. I-95 and extended from Kittery to Houlton. Population within that corridor had grown 25% between 1940 and 1970, while in the same period, the total population of the state had grown only 18%. Population density within the total corridor was over three times the average for the state.

3. Maine's urban population remained relatively static through the period while the national figures showed dramatic growth. Changing definitions of urban population between 1940 and 1950 rendered 1940 data not comparable with later years. However, the 39% growth of Maine's rural nonfarm population between 1950 and 1970 paralleled national experience.

4. Maine's farming population declined precipitously between 1940 and 1970, falling from 165,000 to 43,000, a reduction of 74%. This decrease almost duplicated national experience in the same period.

5. Historically, Maine has always had a larger percentage of population over 64 and under 18 years of age than other states in its region. This fact was exaggerated in Maine by the significant out-migration of career-aged population in search of career opportunities in other parts of the nation.

6. Maine's death rate during the thirty years remained relatively stable.

7. While there was growth in the per capita income during the period, Maine has been unable to close the gap between its per capita income and the national average. Since 1960, the relationship has remained essentially the same and in 1975, Maine's per capita income was 81% of the national average.

In the early 1970's the population pattern began to change. Recognizing this, the commission employed the services of Dr. Louis A. Ploch, Professor of Rural Sociology at the University of Maine at Orono, to study this new pattern. Dr. Ploch's findings showed that after many years of out-migration, Maine was becoming an important in-migration area. People were beginning to move into Maine in greater numbers from the more urban areas south and west of the state. Historically, economic forces have been the major propellent behind streams of migration. Rural areas have traditionally lost population for these reasons to urban areas, and Maine has not been an exception to that generalization.

But in the early 1970's the rural-to-urban migration flow reversed. There would appear to be at least three interrelated causes for this reversal:

Despite the 1974/75 recession, the 1970's nationally have been characterized by a relatively high over-all level of economic affluence as compared to former periods, thus increasing the mobility of people.

There has been a continuing disenchantment with metropolitan areas, including suburbs, as congenial places in which to live and raise families.

There has been a reawakened interest in the environment which tends to be coupled with the attraction to small-town and rural living.

Maine, being the northern anchor of the eastern megalopolis, naturally has become a target of this migrant stream and in the process, many rural counties, which historically lost population, have suddenly begun to gain.

While the specific characteristics of the new residents will be discussed later in this report, of those in-migrants polled, about 10% were transferred to Maine by their companies; about 20% moved to accept new jobs arranged for prior to their migration; about 15% moved to Maine to retire. Some 55%, however, moved to Maine without any stated occupational plan.

In 1970, 10% of the males in the Maine labor force were professional or technical workers, while 11% were managers and administrators. Among the in-migrants identified in 1975, 38% were in the professional or technical occupations and 16% were in the managerial category. Thus, 54% of our newest

residents have professional, technical, and managerial skills and experience.

Also, while Maine's population prior to the 1970's had been aging and had tended to attract as in-migrants a significant percentage of retirees, by 1975 the in-migrants were considerably younger.

When some Maine people learn that the current annual rate of in-migration is equivalent to nearly 4% of the total population, they envision being trampled to death by an invading horde.

The truth, however, is that while some 36,000 persons are estimated to be moving into Maine each year and the annual excess of births over deaths is somewhere between 5,000 and 6,000 per year, our annual rate of net population growth is only on the order of 1.2% rather than 3 to 4%. This is caused by the fact that there is a continued stream of out-migration each year, estimated at approximately 30,000 persons.

Unfortunately, we know very little about the out-migrant. What sketchy data we do have suggest that prominent in this group are young people, both high school and college graduates, who appear to be seeking broader and more challenging economic and social opportunities than they have been able to find in Maine. Some of that out-migration stream also is in part composed of recent in-migrants, who have failed to find in Maine what they were seeking.

There is no data that would suggest Maine is undergoing or will experience a population explosion. On the contrary, all the present evidence points to the fact that Maine's population will continue to grow at a rate of one to two percent per year, unless there is significant growth and change in the number, variety, and attractiveness of career opportunities available. Logically, such a change would both increase the number of in-migrants and decrease the out-migration flow. It is clear, too, that the state of the national economy will also be a determinant of both in and out-migration.

There is evidence to indicate that population within the thirty-mile-wide corridor will continue to grow at a faster rate than in the state as a whole, and because of the energy crisis the corridor growth rate could accelerate significantly.

If, in fact, Maine population does continue to grow at an annual compound rate of 1%, it would total only 1,351,450 by the year 2000. This would mean an increase in the average population density from 34 to 45 persons per square mile.

To identify Maine's new residents, data derived from drivers' licenses issued in 1975 were used. Twelve thousand individuals were so identified and a random sample of two thousand were mailed a detailed, confidential questionnaire. Seventy percent of those surveyed responded, and, on the basis of that sample, the commission found the average new household size to be three persons.

Thus, it was assumed that thirty-six thousand people were moving to Maine each year. Preliminary data for 1976 confirm this assumption.

The survey yielded considerable insight into the characteristics of Maine's new households.

1. Families are young

75% of household heads were under age 50

Just 7% of household heads were 65 or older

Approximately 75% of the total group were between the ages of 20 and 44.

2. Families are small with few children

77% of the households had no children under age 5

Two-thirds of the households had no children in the age range 5 - 17.

3. New residents are highly educated

40% of the household heads have 16 or more years of schooling

Two-thirds of the household heads have had some college education

Despite the common belief, those immigrating to Maine are not settling only along the coast. They can be found in significant numbers in every county and in every size community. Migrants from the most populous out-of-state areas tend to settle in Maine's less populated towns.

It is clear to the commission that Maine is benefitting greatly from these new arrivals, and that their presence could promise great advantages to the state.

> In the more rural communities, in particular, but in all communities in which they have settled, they have provided an important leavening influence and in many cases have stimulated the resurrection of traditional values and activities.
>
> In many rural areas, they are responsible for reclaiming abandoned farms and converting them to productive land.
>
> In other areas, previously denied professional expertise, they have provided sorely needed services in health, education, and finance.
>
> In general, they have become active participants in local and state affairs, evidence of their commitment to their new state of residence, and, perhaps of their recognition of the advantages that Maine, versus more highly urbanized areas, offers in permitting its citizens to fashion their own futures.

As in all things, however, there are two sides to the coin. There is evidence that in some communities their arrival has created community friction. In those instances, longer-term residents have resented the new residents as:

an invasion of "hippies";

a threat to the town's ability to contain its present tax rate because of the increased demands for services which neither the longer-term citizens nor the town are prepared to provide or finance;

a challenge and threat to the vested political heirarchy of the municipality and state;

a force to make the Maine community a mirror image of the communities from which they migrated;

an adverse pressure inflating real estate values, and, by their purchases in coastal areas, denial of coastal access to the ocean;

instigators of zoning and other restrictions limiting individual property owners' rights;

being desirous of making Maine into a "national park" by resisting economic development.

What the ultimate impact of increased in-migration will be remains to be seen. There is every reason to believe that while increased population growth and recomposition are bound to have some negative connotations, there is also great potential for beneficial and constructive change by people who "adopt" Maine because of what it represents to them.

Summary

Maine's historical demographic patterns and trends have been changing significantly since 1970. The extent to which these new trends will continue depends on a number of economic and energy factors both in and outside Maine.

While Maine's population growth has increased, it is not explosive and there is no reason to believe it will exceed a one to two percent compound annual rate.

Perhaps the most significant factor is not the size of the in-migration stream but its composition. Present evidence indicates that the primary motivation of in-migrants is voluntary and the result of their positive attitude toward Maine. These facts augur over-all benefits for Maine's future.

It is essential, however, that Maine's government establish a mechanism by which it can monitor changes in population and know more than at present about the people who populate the state. This is essential to the day-to-day management of state affairs and to the assurance of adequate long-term planning. The character of the state, the structure and functions of its government, the breadth and variety of services required and rendered, and the strength and vitality of its economy will be determined by its people.

The commission has reached no conclusion as to where population growth should be concentrated. It recognizes that there are many areas which could accommodate significant population increases without impairing those environmental qualities so important to Maine people. The commission believes that the determination of where growth should be encouraged is a very complex question which requires much greater depth of study than the commission was equipped to give. For example, while seventy percent of Maine's population lives in a thirty-mile wide corridor which bisects the state, that corridor also contains thirty one percent of Maine's best farmland, which would be seriously jeopardized by additional and extensive growth. Equally complex problems exist in a number of other regions of the state. For these reasons, the commission has decided to leave the development of a blueprint for future population distribution to others better equipped to complete a more extensive study.

Natural Resources

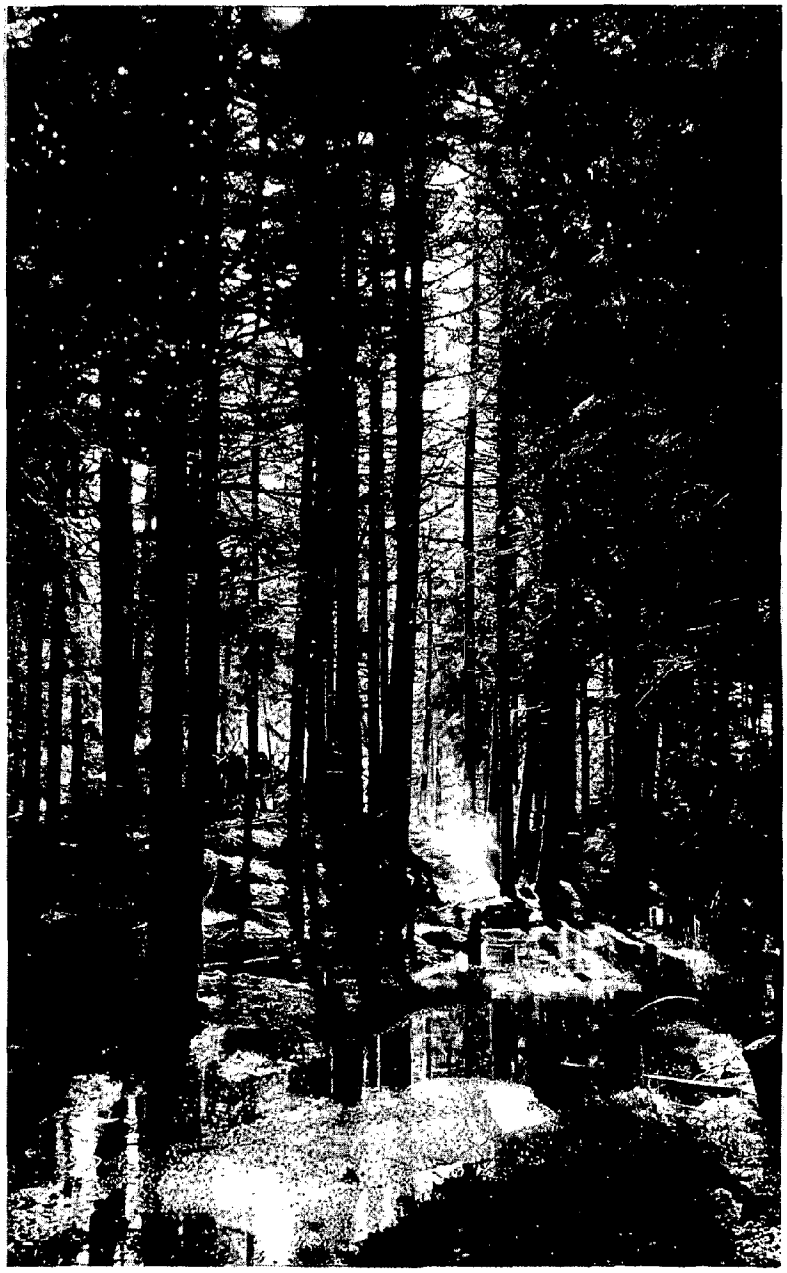
As one looks to the year 2000, the commission believes that the economic future of Maine depends almost entirely on its available natural resources. They are of ever-growing interest to the New England region and to the nation. They are substantial resources. They are essentially renewable resources. Some have been well husbanded over the years; some have been depleted by failure to keep them revitalized. Over-all, they offer extraordinary challenge to the productivity and benefit of the people of Maine.

Commission Policy Recommendation

I. **It is recommended that it be an overriding policy of the State of Maine to protect, manage, and utilize Maine's natural resources for the benefit of Maine people in such ways as to ensure their long-term availability. The policy goals on natural resources should be carried out within this policy statement. Additionally, it is recommended that:**

II. **The State of Maine develop and annually update, through its various departments and agencies concerned with natural resources, a twenty-five year natural resources management plan which will encompass all natural resources, recognize their interrelationships and interdependencies, and assure their proper management and utilization in perpetuity for the benefit of present and future generations of Maine people.**

The Forest Resource



Ninety percent of the state is forested. The timberlands provide renewable raw material to the paper, lumber, and wood product industries, which every year generate one billion dollars gross manufactured value to the Maine

"Need forestry education through workshops for general public and private woodland owners . . ."

"The University needs to branch out regionally to better serve Maine people. Since my husband's family is in the dowel business, I am particularly interested in new wood product development. . ."

"Wood is an extremely valuable resource in this state but steps have to be taken so the forests aren't completely stripped — i.e., aesthetics have to be taken into consideration"

"Strengthen the marketing and utilization branch of the Maine Forest Service. Maine has only one extension forester. That is absurd. Improve public access to information published by state agencies. . ."

economy. Wages in these industries are approximately 47% higher than those for other production workers in Maine. While impossible to establish a dollar value, the forest's importance to recreational activities, such as hunting, camping, fishing and canoeing cannot be over-estimated. Since most of the forestlands are privately owned, the state's role in forestry is complex. Yet, regardless of ownership, it is in everyone's interest that the forests be well-managed on a sustained-yield basis to provide the raw material for wood products for future generations.

Pressures on our forests are mounting. As transportation and energy costs rise, Maine may become the major eastern supplier of softwood, a role previously held by western states. Yet some five million acres are in serious need of improved management. These lands belong primarily to the small woodlot owners, those owning five hundred acres or less, to whom little professional management assistance is available.

Efforts should be undertaken now to recognize the importance of Maine's forestlands and to prepare for the increased demands that are going to be placed upon them.

Commission Policy Recommendation

III. It be the policy goal of the State of Maine to make use of its forests by assigning high priority to the best management of its forest resources.

Possible Means Of Implementation

1. Take active steps to encourage research to seek improved control methods of disease, with emphasis placed on integrating biological, chemical, and silvicultural disease controls.

2. Expand the service forestry program of the Bureau of Forestry to provide increased technical and management assistance to small woodlot owners. The use of mass media and cooperative arrangements with the private sector should be considered.

3. Increase through promotion and technical assistance the marketing of high value wood products made from both high and low value wood to ensure proper management, imaginative use, and maximum enhancement of the forest resource.

4. Complete and maintain a soils and site quality inventory in the forested regions based on characteristics directly relevant to the productivity of major forest types.

5. Fund increased research for the greater utilization of what are presently lesser-used and lesser-quality species.

6. Conduct continuous analysis of the feasibility of forestry practices not economical at present. Attention should be paid not only to cutting practices, but also to fertilization and genetic improvement. Establish a level of cut consistent with the renewability of the resource.

7. Require the State Bureau of Forestry to report regularly to the Natural Resources Committee of the legislature its assessment of the quality of management of Maine's forestlands, both private and public.

Citizen Comments

"Education is most important in these matters. Encourage finished product production of Maine wood by small-scale operations and craftsmen. Education to make this possible. The wood's here, and there are a million ways to use it. . ."

"Emphasis on the utilization of under-utilized species. Emphasis on secondary and final wood using operations."

"Make available courses for small woodlot owners. FREE CLINICS in various towns to make it easy and feasible for small owners to attend ."

The Fisheries Resource

Maine's fisheries have declined in relative economic importance, but perhaps no other natural resource offers greater future potential, now that the 200-mile fishing limit has been established.

At the present time, fishing in Maine is essentially an inshore industry. If foreign fishing pressure is relieved within the 200-mile limit, some fisheries experts estimate that cod, haddock, and other commercial species may recover their former stocks within five or six years. Such an interval would give Maine time to prepare for fishing offshore and for handling the harvest when it comes ashore. Maine ports are woefully inadequate to handle existing fisheries, much less the potential harvest from an expanded fishing industry. The fishing vessels are small, poorly equipped and outdated, unable to venture far offshore.

The development of aquaculture — the farming of salmon, trout, oysters, and other shellfish — offers the promise of adding supplemental value to our fisheries in the years ahead. Despite the rigors of the climate, Maine is attractive for aquaculture because of its hundreds of bays and estuaries and because of the preponderance of clean water not found to the south. The commission believes a great deal more research and development is needed so that this promising effort may continue in the future.

"The fishing industry needs market development, preferably by private industry, encouraged by state government, and other development will follow. . ."

"Maine needs fish processing plants within the State and should not continue to send raw products to Boston. . ."

"The State should encourage more fish farming (both ocean and inland and also fish processing). I'd like to see Maine shipping out fish as a finished product, thereby benefitting our economy in many ways. I'd also like to see inland fish made available to the consumer. Just because I don't fish myself doesn't mean that I don't like brook trout.. . ."

Though the commission believes Maine must look primarily to its own resources for the development of its fisheries, it recognizes the need for federal assistance in the following three areas of concern:

1. Preservation of the ocean from poisonous dumpings of pollutants and waste products to ensure productivity.

2. Firm enforcement of the 200-mile limit to ensure sound fisheries management.

3. Settlement of the Atlantic boundary between Maine and Canada to determine U.S. fishing rights to Georges Bank.

Fish are a valuable source of protein and an adequate supply of protein is going to be one of mankind's greatest needs in the future. Maine should be prepared to become an important provider of this protein.

Commission Policy Recommendation

IV. It be the policy goal of the State of Maine to make best use of the fisheries by assigning high financial and technical priority to the maximum development of its fisheries resource.

Possible Means Of Implementation

1. The ability of the ocean to sustain fishing can only be realized if competing uses of the coast are managed.

   a. The clean-up efforts of the coastal waters must continue so that greater areas of the coast can be opened and maintained for clamming and other sea-harvesting activities;

   b. Take steps to alleviate the problem of over-fishing by both foreign fleets and Maine fishermen. International or unilateral regulations and stricter licensing controls should be considered;

   c. Set aside suitable sites for which the primary purpose would be the production of protein.

2. Expand the ability and activities of the Department of Marine Resources in the promotion of Maine seafoods and other sea products.

3. Encourage and participate to the extent necessary in the financing and construction of modern port and freezing facilities at strategic points along the coast.

4. Finance the design and construction of fishing vessels capable of multi-species fishing, built in Maine boatyards, and leased to fishermen or their organizations on terms that are mutually attractive and economically self-supporting, utilizing the leverage that exists between the financing rates available to the state and those the fishermen would have to pay.

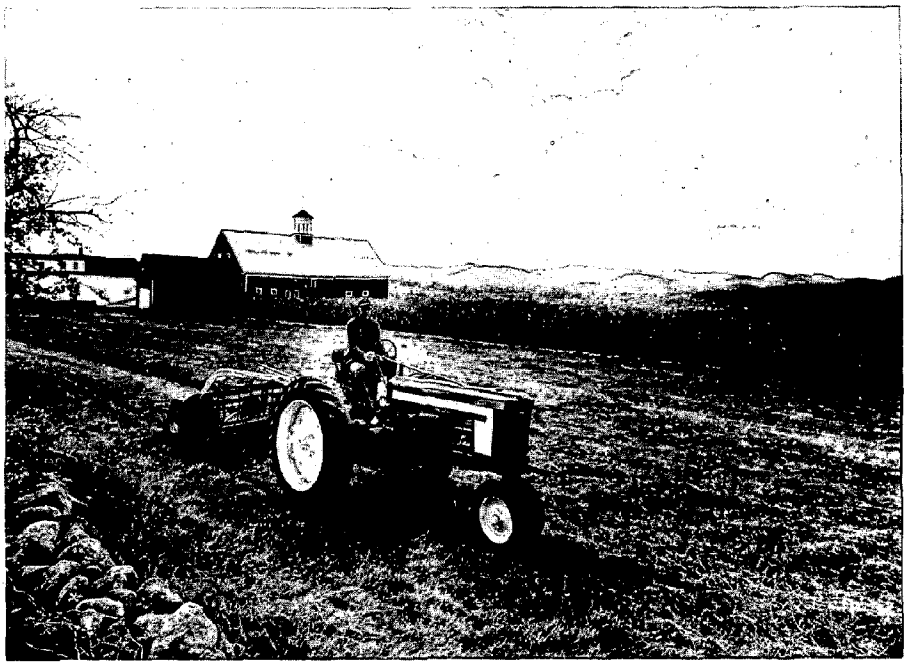
Citizen Comments

"It is appalling that Maine has not developed a long-range management plan for the fisheries nor the imposition of tighter controls on harvesting declining species. . ."

"Pressure the congressional delegation for federal help for fishing industry: Aquaculture and resource management. . ."

"The fishing industry, from start to finished product, must keep the income in Maine. Marketing is important. Help the fishermen where possible. . ."

The Agricultural Resource



Although agriculture has declined severely in economic importance over the last century, it is the ninth largest industry in Maine, with a gross product of almost 300 million dollars. Maine still has thirty-one percent of all the farmland in New England.

This reduction in farming is very disturbing to the commission as it looks ahead and sees the probable increase in difficulty of importing adequate fresh produce from states upon which Maine has become increasingly dependent. It is reasonable to assume that in the future, states such as California and Florida will have sufficient population growth as to demand their farm products be retained within their boundaries. Maine, already in a disadvantageous position in regard to transportation costs and increasing energy costs, is going to find it expensive, if not prohibitive, to continue to rely on other regions of the U.S. for staple foods.

Economic conditions are having a serious impact on agricultural land. In the southern, more populated areas of the state, the incentive to convert farmland to non-farm uses is high. Population growth pressures and changing housing patterns have encouraged development outside urban areas — often on the most productive farmlands. Prime agricultural lands have not only the best soils for growing, but also the best characteristics for building houses, roads, shopping centers, and parking lots. Once converted, agricultural land cannnot be reclaimed for agricultural production.

"We must have tax relief for those who are using land or would like to develop agricultural or forestry use for their lands. . ."

"I feel great stress should be placed on reviving agriculture in this state as it has the resources available to do so. Tax incentives or whatever are necessary to encourage more people to go into it. Adult evening discussion courses should be offered on the various campuses."

"Reclaim old farms. Encourage people to rebuild soil and grow food. Educate in schools, elementary level and up. . ."

In northern Maine, mismanagement and poor farming techniques have led to serious soil erosion and the depletion of necessary soil nutrients. Erosion and depletion of soils is occurring so rapidly that within twenty-five to fifty years it may no longer be possible to grow potatoes in much of Aroostook County. At a time when food production is of critical concern the world over, the state must take an active role in encouraging and promoting as much economic use of Maine's natural soil base as is consistent with long-range, sustainable activity.

Commission Policy Recommendation

V. **It be the policy goal of the State of Maine to preserve and reclaim agricultural land and to encourage the production, marketing, and diversification of agricultural products.**

Possible Means Of Implementation

1. Investigate the feasibility of the development of greenhouse gardening of vegetables and other fresh produce utilizing the waste heat of utilities and industries.

2. Encourage controls to prevent soil loss and develop legislation to enforce these controls when voluntary cooperation fails.

3. Modify tax assessment of farmlands to reflect current use value and also modify, to the extent necessary, estate and inheritance taxes to ensure orderly transfer of farmland and the continuity of farming.

4. Develop and promote a packaged quality of Maine potatoes higher in quality and uniformity of size than is required currently by U.S. Grade A.

5. Encourage, through the Congressional delegation, incentive programs to be administered by the State Department of Agriculture to effect the reclamation of agricultural land.

6. Because sound soil management is vital to the protection of agricultural land, the Department of Agriculture, in cooperation with the University of Maine, should continually assess the rate of soil erosion on agricultural lands and develop reasonable requirements to prevent further erosion and to refurbish the soil base.

7. Promote the use of non-petrochemical fertilizers for agricultural use, utilizing to the greatest extent possible resources within Maine. Research should be geared toward establishing small industries to produce and market natural fertilizers.

8. Make sales tax treatment of farm equipment identical to the tax treatment of industrial production equipment.

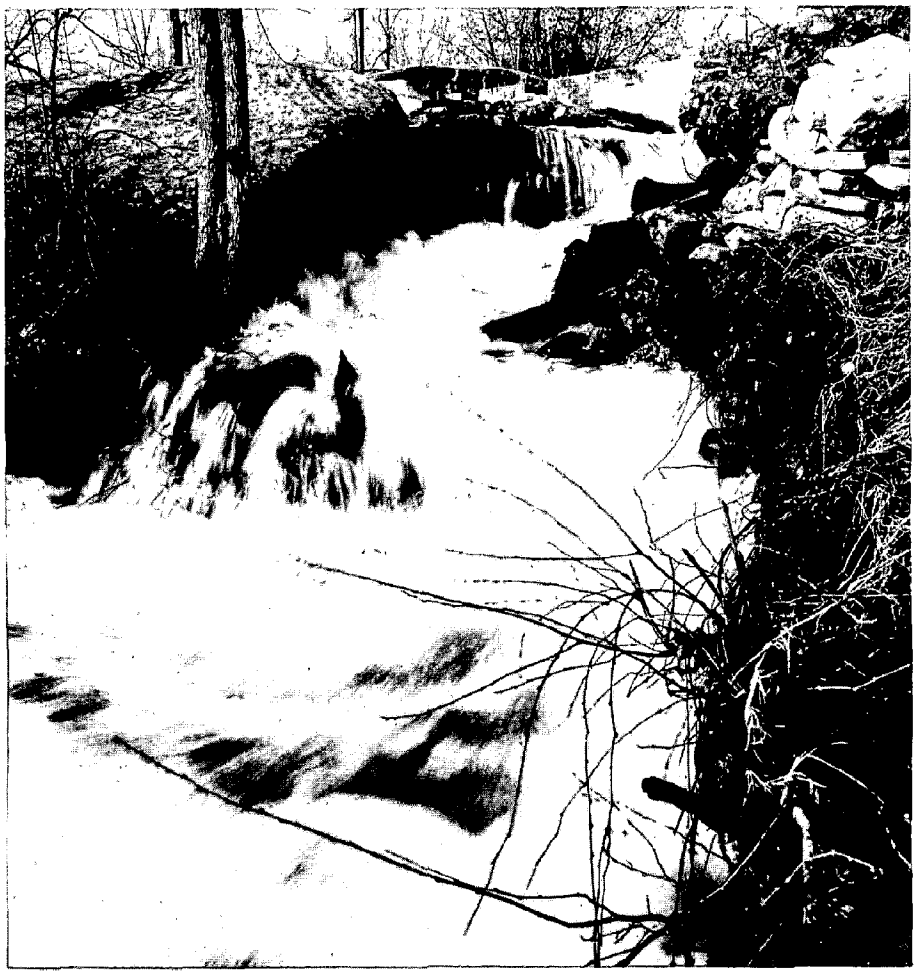
"Develop a new variety of potato to meet consumer needs or processing needs. The finances will take care of themselves. . ."

"Stop blacktopping farm land."

"Drastic steps to stop erosion, immediate steps to improve soil, and a 25-year-plan objective. . ."

"Important that soil depletion be reversed and that organic, non-petrochemical fertilizers be used. . ."

The Fresh Water Resource



Maine's fresh water lakes and rivers are vital to our supply of drinking water and to such activities as power generation and manufacturing, but may be appreciated more from the public viewpoint for their ability to support recreational activities and wildlife.

As population density increases, the adequacy of our potable water supply will also become an increasingly important concern. Studies have already shown that it is a major public concern in the southernmost areas of the state. States south of us, Massachusetts in particular, are already voicing alarm about the supply of potable water and are instituting water-use bans to conserve jeopardized supplies.

"Officially declare Maine's supply of fresh water one of our greatest assets. . ."

"Before I die, I would like to be able to drink out of the river in front of our house. . ."

"Our waters are far from cured of pollution; I would like to see control enforced. . ."

Thus, Maine should not only continue to pursue aggressive water clean-up and protective policies, but also prepare for the day when water could become an important export commodity to others less endowed, or a principal attraction to population and industrial growth.

Commission Policy Recommendation

VI. It be the policy goal of the State of Maine to recognize fresh water as a finite natural resource essential to the economy and environment, and to ensure its high quality.

Possible Means Of Implementation

1. Undertake and complete a ground water inventory of the quantitative characteristics of the state's underground aquifiers.

2. Monitor the effects of man's activities as they relate to the long-term welfare of wetlands, particularly those adjacent to development sites.

3. Continue the water quality monitoring and enforcement program by the Department of Environmental Protection.

Summary

As the commission looks into the future, three facts become apparent:

> We will become much more dependent on our natural resources in the future; the importance and value of those resources will increase significantly.
>
> In all probability, the greatest problem which will confront the world in the longer-term future will be the adequate supply of food and protein. Maine could play an important role in meeting that need.
>
> The key to ensuring long-term sustained yield of any of our natural resources will be careful, controlled management.

Perhaps the starting point in assuring future natural resource availability and value should be the passage by both the House and Senate of a resolution which clearly articulates the importance and priority of natural resource protection, renewability and effective utilization. Such a resolution could provide a basis for measurement of the need and desirability of subsequent legislation.

Environment

Though Maine's forestlands, fishing grounds, agricultural lands, and fresh waters have been singled out as the most important natural resources to the future growth and development of Maine, they are only part of the total environment.

They cannot be considered independently. Their very existence is heavily dependent on the natural balance of the total environment — the sun, the soils, the water, the air, the wildlife — all of which are interrelated, all of which have a very important function to ensure the continued health and vitality of resources so vital to the future of Maine.

Maine's natural environment is the result of millions of years of evolution. Our fragile mountain habitats and inland wetlands support communities of plants and animals which are as important to Maine's natural environment as air itself. Our open space, salt water marshes, scenic vistas, bird-nesting areas, and coastal islands, although not necessarily of vital economic importance to Maine, represent a state and national treasure of inestimable value.

Yet, much of our environment is so fragile that it can be destroyed virtually overnight by a single rash decision, often made in the name of "progress" — the loss of topsoil that took thousands of years to build by a simple decision to develop a new housing project or the deterioration of a stream to accommodate the discharge of industrial waste.

Maine's greatest opportunity for the future lies in its ability to encourage and develop a common sense, practical attitude toward integrating human activities with the ability of the environment to support them. It is imperative that we develop such an attitude and begin now to prepare a plan that will realize the greatest future potential from our environment. Such a plan will best be achieved through a strong partnership between the public and private sectors. Each must assume responsibility and be committed to strong mutual support.

The delicate balance and the complex interrelationships which characterize the natural environment should always be a consideration in any policy decisions relating to the future growth and development of the State of Maine, since long-range and irreversible effects of severe disruptions in the natural environment will affect not only our life styles, but our economic well-being as well.

Commission Policy Recommendation

I. It be the policy goal of the State of Maine to stimulate through education widespread public awareness and appreciation of the basic characteristics and unique qualities of Maine's natural environment and of the demands being placed upon it.

Possible Means Of Implementation

1. Expand the educational curricula and continuing education programs at all levels of education to include natural resource courses and to promote public awareness of the costs resulting from inadequate resource protection and management. Particular emphasis should be placed on the importance of sound land use practices and the implications of uncontrolled or unanticipated growth.

2. Increase funding of technical institutions to provide high quality training in resource management skills including, but not limited to, farming, forestry, fishing, and aquaculture.

3. Promote resource protection and management through the media, highlighting the distinctive qualities of Maine's natural resources and environment.

4. Make it possible for citizens to become more involved in land use planning by:

    a. providing information and education on the implications of land use decisions;

"Get agriculture, and horticulture education and careers into vocational technical institutes. . ."

"Why doesn't the University of Maine do a lot more in the area of oceanography?. . ."

"There should be more emphasis placed on more research into development and use of (natural resources). . ."

"Public conservation and forestry programs in Maine are underfunded and being nickled and dimed to death. . ."

"The environmental agencies have too much control and free hands to limit a landowner as to what he can do with his land. . ."

b. providing access to data on public land use policy development and enactment.

5. Encourage via the Department of Education and Cultural Services greater use of children's summer camps as public environmental classrooms during the camps' off-seasons.

Commission Policy Recommendation

II. It be the policy goal of the State of Maine to ensure that the development, administration, and enforcement of environmental regulations be efficient, adaptable, and reflective of environmental interrelationships.

Possible Means Of Implementation

1. Encourage local and regional initiative by establishing statewide guidelines for environmental protection while giving municipalities adequate flexibility to act for themselves, as was recently done in connection with shoreland zoning.

2. Ensure that adequate resources and funds are available to the State Planning Office to coordinate the development of a comprehensive plan for the state.

3. Define clearly the "long-range public interest" in all public policies and study the effects of those policies with respect to their impact on private rights.

4. Consider a state matching grant program to spawn prototype recycling and energy recovery facilities for municipal or regional entities.

5. Enable persons within a region to express themselves through public referendum when major industrial developments will have a potential environmental effect on regions beyond the area of immediate jurisdiction.

6. Enable the county or some designated regional organization to be the enforcer and administrator of environmental regulations in the organized territories, except in cases where environmental impacts will or might transcend the county/regional boundary. Regionalization will only be accomplished if state planning monies and programs are made available to regional planning groups. In funding proposals, preference should be given to municipalities which have joined together in an effort to solve a common problem.

7. Enable the creation of river corridor commissions, similar to the Saco River Corridor Commission, to effect better management of the state's land and water resources.

8. Charge a single agency with the issuance of all environmental permits and licenses.

"I believe we should do all we can to train young people to know this field and attempt to keep them in Maine . . ."

"Find alternative uses for basic materials. . ."

"I would like to see controlled development within limits so we don't abuse our quality of life in the rush for riches . . ."

"Without being snooty, we ought to have suitable environmental zoning controls to forestall Maine becoming an extension of the mid-Atlantic Megalopolis wasteland . . ."

"Encourage uniform growth in the northern areas of Maine, away from the growing southern urban areas of the state . . ."

Commission Policy Recommendation

III. It be the policy goal of the State of Maine to encourage diverse land uses consistent with the ability of the land to support such uses, with particular emphasis on Maine's long-term needs for food, fiber, housing, recreation, and economic growth.

Possible Means Of Implementation

1. Require reclamation of land with a ground cover after mining operations have ceased.

2. Such open space as: scenic areas, streams, rivers, lakes, ponds, flood plains, beaches, prime agricultural land, wetlands, marshes, swamps, wildlife areas, parks, and historic sites should not be regarded as land in holding for future development, but rather as land already dedicated to a specific, perpetual use.

3. Take preventive action to protect the publicly owned shores from erosion, using measures compatible with the environment, such as sand fences, beach grass, beach fill, etc.

4. Place a high priority on minimizing future "urban sprawl" by encouraging the revitalization of existing town and urban centers and by applying comprehensive, integrated planning to the development of such new urban areas as may be required.

5. Give full consideration to land use plans and objectives in the planning and development of transportation systems and networks.

6. Encourage housing design and location to conserve land and to minimize their impacts on the physical environment.

7. Develop the tools to assist towns in preparing for growth and its effects.

8. Establish a state-wide land use inventory within the classification system to determine urban, agricultural, recreational, and other best land use potentials. Also needed is a system to monitor land use changes to determine the impacts they have on the land and the adequacy of existing techniques to cope with any adverse effects. This information should be made available to the public to increase awareness of the competitive uses of land.

9. Consider the purchase of those lands containing fragile areas, areas with unique flora, or special recreational or aesthetic potential for the people of Maine. Emphasis should be on those areas which are in danger of being converted to other uses. Such acquisitions should be made in accordance with a rational plan based on established priorities.

"Cluster growth, way to go — Keep housing off: shoreland, farmland, and forestland . . ."

"Other states are considering limitations, perhaps Maine should . "

"Can handle slow growth if handled with regard to preserving farm lands, fishing, natural resources . . ."

"Growth controls must be developed by the State Planning Office and the Regional Planning Commissions to aid towns . . ."

"We should determine how many people we can accommodate, set a limit . . ."

10. Ensure that development of the land is compatible with the physical characteristics of the land. This would require a working, practical understanding of land use and water management.

11. Make provision for mass public transit and new modes of inter-city transport within the corridor that conserve land and provide rapid and efficient modes of travel.

12. A coastal ecological system which remains as relatively intact as the Maine coast is highly unusual and is deserving of our constant and careful attention to its preservation and sound management.

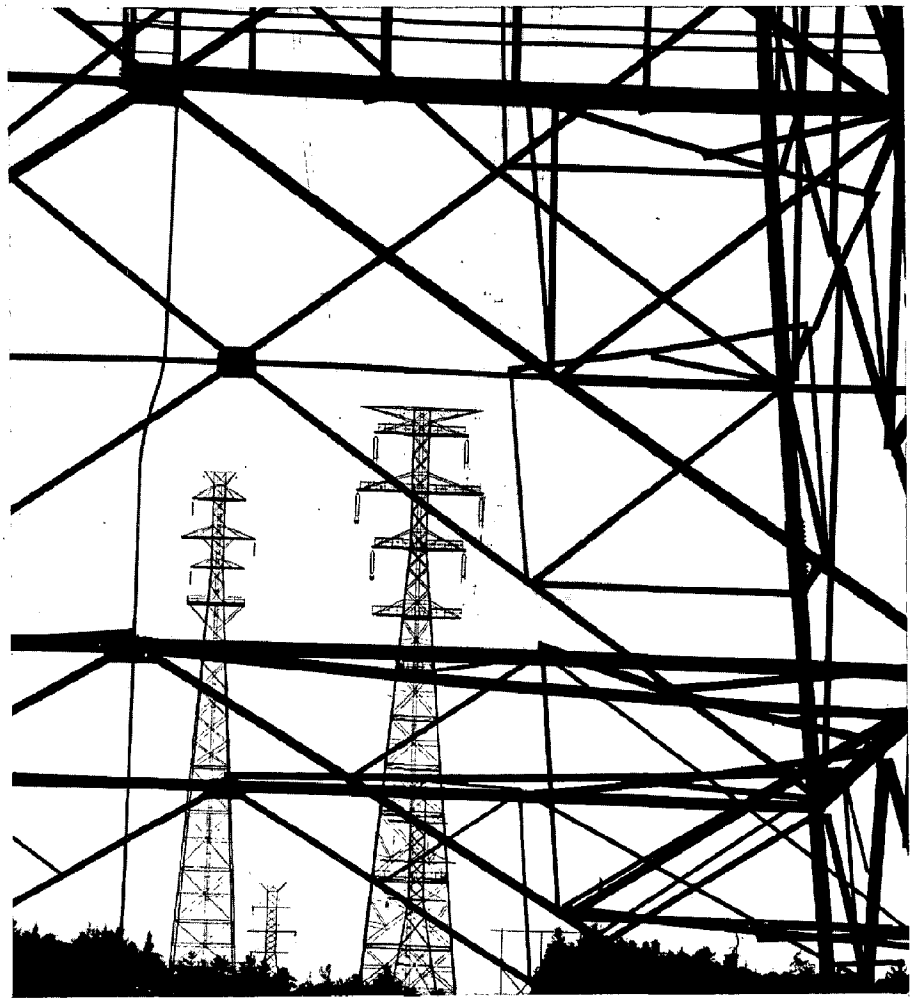
Commission Policy Recommendation

IV. It be the policy of the State of Maine to promote and encourage more formal relationships with other New England states, Canada, and the federal government to deal with environmental concerns.

Commission Policy Recommendation

V. It be the policy goal of the State of Maine to strengthen its capability to monitor and evaluate the effects of economic and other human activities upon its natural resources, both renewable and non-renewable, for the specific purpose of enabling the state to preserve and enhance the quality of life for all present and future residents of Maine.

Energy



It would be difficult to find a better example of the reluctance of human beings to plan long range than the failure in past years of the people and governments to take the actions necessary to avoid the energy crisis the world now faces.

The handwriting of potential energy shortage has been on the wall for many years, but only recently have public officials read it seriously. While the technology for a number of alternate energy sources was developing decades ago, it went disregarded. Cheap oil was both politically and economically more expedient. That oil represented a finite resource was of little or no concern.

As the American people over many years have developed lifestyles and habits casual in consumption and waste, we must now effect dramatic change at dramatic cost.

Because the crisis is national, the easiest position the commission could take would be simply to acknowledge that fact and relinquish Maine's future energy problems to solutions promulgated and imposed by the federal government. The commission is not so inclined, though it does not profess any technical expertise in the subject. It has strong conviction that Maine must take bold action on its own behalf or potentially suffer consequences, not necessarily compatible with the best interest of its people.

The attention of both Maine's people and government must be focused on its future energy problems and a commitment made by all to seek the means of assuring adequate future energy supplies.

Maine is an energy-dependent state. Only 12.3% of our total energy requirement is supplied by two native sources, hydro and wood. The balance is met by fossil and nuclear fuels which must be imported.

Maine's energy consumption has been increasing steadily in recent years, particularly in industrial, transportation, and residential uses. Demand has been growing at an annual rate of 3.3% and is expected to increase to 4-7% annually in the future. Although two new electrical generating facilities are expected to go on line in the decades ahead, they will not increase Maine's capacity sufficiently to satisfy the state's predicted needs into the twenty-first century.

At the present time, then, Maine is particularly vulnerable in its dependence on external energy sources and must be conscious ofsthe need to reduce its dependency to the greatest extent possible.

As non-renewable sources dwindle in supply and greatly increase in costs, the effects could be severe on a state in which:

> both per capita and household incomes are well below regional and national averages;
>
> people are almost totally dependent upon individual automobiles for transportation;
>
> significant travel distances are required between home and work;
>
> cold weather, winds, and snow dominate the climate six months of the year;
>
> there is a heavy dependence on imported oils and total dependence upon imported transportation fuels.

Those attached to the rural lifestyle could be forced to provide more of their own needs and forego jobs providing steadier and higher incomes.

In-migration might well be discouraged except for those young enough to seek their living from the soil or sea or those sufficiently affluent to bear the burden of an increasingly high cost of living.

"Encourage the use of home generators, wood stoves, require new housing to include potential for alternate energy sources such as solar and wood . . ."

"No nuclear power plants . . ."

"I think that nuclear power wastes need more study . . ."

"I believe the state government should push all power generators into extending the hydro electric aspect of energy . . ."

"Solar, wind, and wood are terrific for the individual power user but are not practical for large scale power production. Study after study has proven this to be the case, there is research being done to perfect solar production of electricity, but until the technology improves, and it will, it must remain small-scale . . ."

Out-migration might be encouraged among those unable or unwilling to gain their living from subsistence farming or comparable pursuits.

The long Maine winter and high fuel costs will force homeowners to resort to alternative and supplementary sources of heat and greater investments in insulation and other heat-conserving improvements.

Simultaneously, major employers will be forced to develop significant sources of energy, ranging from hydroelectricity to the burning of waste materials. Smaller firms will find it increasingly difficult to maintain profit margins because of greatly increased energy costs.

The commission recognizes this as a grim scenario, but feels the seriousness of the potential energy problems deserves dramatic treatment. There are countermeasures that can be taken and the time to start taking them is now. Maine people must realize that our ability and willingness to recognize the situation and act will be a major determinant of what happens to our population, employment, and lifestyles in the years ahead. To ignore the problem is to seriously jeopardize the quality of life of Maine citizens.

Commission Policy Recommendation

I. **It be the policy goal of the State of Maine to encourage maximum energy conservation and to encourage the use of renewable energy resources.**

Possible Means Of Implementation

1. Urge energy conservation in construction and renovation of buildings by developing building codes, regulations, and incentives which:

    a. encourage the use of energy-conserving designs and materials in new construction;

    b. promote the use of wood, water, the sun, and other renewable resources for long-term energy production;

    c. encourage the use of more energy-efficient lighting in homes and other buildings;

    d. permit construction of underground buildings and facilities in order to reduce heating and cooling requirements;

    e. encourage by use of tax credits increased use of insulation in new and renovated buildings.

2. Review all past and future state legislation and regulations which discourage energy conservation or the sale of excess electrical power produced by industry.

"Strong tax and lending incentives should be made available to individuals and companies who invest in solar and wood heating equipment and wind electric generating equipment . . ."

"Higher exise tax on cars with low gas mileage rates . . ."

"The state should block all attempts by the 'Super-Environmentalist' to prevent the construction of a coal-fueled electrical generating plant . . ."

"Hydro power from small rivers."

"I am for a power plant in Maine if it means cheaper power costs, and most of the power stays in Maine . ."

3. Seek federal assistance in exploring energy production possiblities from the products of the Maine forest, concentrating on the potential of non-commercial and low-grade wood.

4. A tidal plant, such as the one proposed at Cobscook Bay, should be studied to evaluate economic and environmental impacts.

5. Encourage all non-destructive hydro potential in the state. It appears that some abandoned sites, dams, and old mill streams might be refurbished into small operational units, and that existing, marginally operating plants with presently high maintenance costs could also become feasible as the economics of energy production change. A study should be conducted on the potential to construct additional small-scale sites. Massive hydro-electric projects which involve environmental sacrifices should not be permitted if feasible alternatives exist to meet Maine's energy needs.

6. Do not prohibit additional nuclear facilities, but consider each on a case-by-case basis with special emphasis placed on thermal pollution,operational safety of the plant, and a satisfactory solution to the problem of disposal of radioactive-spent fuel.

7. Encourage research efforts on the use of the sun, wood, wind, solid waste, and other alternatives for energy production.

Transportation

Next to energy, and very closely interrelated, transportation will be one of the most critical factors affecting Maine's economy and lifestyle in the future. It represents 28.8% of Maine's total energy consumption today.

Our transportation system has been increasingly dependent on highways since World War II. The rural character of the state makes Maine citizens heavily dependent on the private automobile and has denied the economic feasibility of mass transportation.

The convenience of door-to-door delivery and the speed of trucks have caused rail transport to decline in importance. Coastal water transport of cargoes, so important in by-gone years, has disappeared.

The long commuting distances citizens must travel from home to work, the fact that more than 70% of all products produced in Maine are exported to other states and nations, and the heavy dependence of Maine agriculture on the import of feed grains, to name just a few factors, dictate that Maine must focus priority attention on its transportation system as it looks ahead.

Rail

While rail may not today play as important a role in Maine's total transportation system as it once did, it is of vital importance, particularly to the agricultural economy of the state.

Most of the feed grains required by Maine agriculture must be imported from the midwest by rail. Agricultural producers in Maine are estimated to use approximately one million tons of feed grains per year.

Interstate Commerce Commission rates governing the transportation of feed grains in New England are 70% higher per ton-mile than are similar rates governing the shipments of feed grain to southeastern poultry producers, the prime competitors to Maine's poultry industry. Additionally, because of the greater distance required to reach Maine, the differential amounts to an $11.88 per ton disadvantage to Maine producers based on three-car rates.

The current system of continual percentage rate increases will ultimately destroy the industry; the only argument in this area concerns the amount of time before such destruction takes place.

The need for stronger and better rail service in Maine cannot be overemphasized. The energy crisis will require utilization of the most fuel-efficient means of transporting cargo. In terms of the greater tonnage rail can transport in a single train, railroads must play a more important role than they have in recent years.

Highways

In a rural state, such as Maine with an area as large as the total of the five other New England states, people and businesses are heavily dependent on the private automobile and trucks. Confronted with an energy shortage, Maine's businesses, industries, and the traditional lifestyles of its people will be in an extremely vulnerable position.

With limited mass transit available only in the larger cities, with rail service limited, slow, and in some cases more expensive than other modes of transportation, with the long commuting distances inherent in the state's rural character, and with Maine business and industry heavily dependent on trucks, it is not likely that Maine can easily or quickly shift its emphasis from highways. Neither does it appear practical to the commission to assume that individual citizen preference for the private automobile will change voluntarily.

Yet the changing economics and availability of fuel may force some very real changes in the character of highway transportation. Fewer road expansions, less new road construction, smaller, more fuel-efficient cars and the development of alternative means of travel may well replace the traditional emphasis on the large private automobile as a practical mode of travel. Careful consideration should be given to the problems which could predictably confront highway transportation in the future.

"Eliminate the dedicated gas tax revenue and use it for improved rail or other mass transportation . . ."

"Roads are probably the least desirable from an energy standpoint . ."

"Coastal ship service for cargo — would need to coordinate with cross-country transport: roads, airplanes etc."

"Railroads. Railroads. Are we so jaded that we've forgotten the haunting sound of the local freight blowin' 10 miles out of Brownville Jct. or Belgrade Depot?"

"A train from Portland to Boston ."

"Higher excise taxes ecourage old clunkers on the road. A different structure would be better . . ."

Air

Air passenger service in Maine is both adequate and reliable, but the lack of direct links to both Montreal and the Maritime Provinces is conspicuous. Canadian markets offer a very logical means of expanding opportunities for Maine manufacturers and businesses and are of great importance to consolidating and expanding Maine's tourist business from Canada. Therefore, linkages from both Portland and Bangor would appear to be highly desirable.

Air freight is shipped from both Bangor and Portland, but manufacturers and businesses still rely heavily on Logan International Airport in Boston.

Air service is of considerable importance to the vitality of Maine's business, industry and tourist trade.

Water

At present, two ferries connecting Maine with Nova Scotia and vessels transporting oil and limited dry cargeos represent the total extent of water transportation in a state once heavily dependent on coastal and trans-ocean shipping.

Years ago, regular steamship service existed between Maine, Massachusetts, and New York for both passengers and cargos. Vessels regularly plied the coast, providing both passenger and cargo service to many Maine communities.

When one considers the energy problem and envisions the estuarine character of Maine's coast, one begins to realize the potential role that water transport could play in energy conservation. Businesses located on the ends of peninsulas presently require trucks to travel enormous distances to serve them. Peninsulas, often only a few miles apart by water, are many miles apart by road.

For these reasons, the commission recommends that a study be undertaken to determine the feasibility of redeveloping coastwise water service for both passengers and cargoes to serve intra-state transportation needs and to tie Maine to markets along the entire eastern seaboard.

Vessels, loading at many points along the coast and connecting with other forms of transportation at central locations, would be fuel-efficient and would seem to complement the tourist industry as well.

Certainly, water transportation should not be overlooked in considering Maine's future.

The economic feasibility of diverse modes of transportation, particularly those more fuel-efficient, must be re-examined, and creative thought must be applied to the problem of assuring adequate transportation of Maine people and products in the future.

"Local car pooling data at town levels . . ."

"Rail, water and mass transportation necessary in the future . . ."

"We are subsidizing the roads. Perhaps subsidizing the rails might make them more aggressive again. We know from Florida that it is possible . . ."

"Redevelopment of coastal ship service for passengers and cargo . ."

"Expand railroads to Canada, not roads . . ."

"Try pilot project with parking areas on the Turnpike . . ."

"The state spends too much on highways . . ."

Commission Policy Recommendation

I. It be the policy goal of the State of Maine to develop air, water, and rail transportation to achieve the greatest possible fuel efficiency and maximum service to Maine citizens and businesses.

Possible Means Of Implementation

1. Investigate the potential of developing a coastal cargo service utilizing the port facilities as recommended above.

2. Explore the possibility of developing increased air freight facilities in Maine airports.

3. Study the feasibility of establishing mass transportation facilities within the next 30 years within the population corridor, acquiring at strategic points along the road system parking and passenger depot facilities for cars.

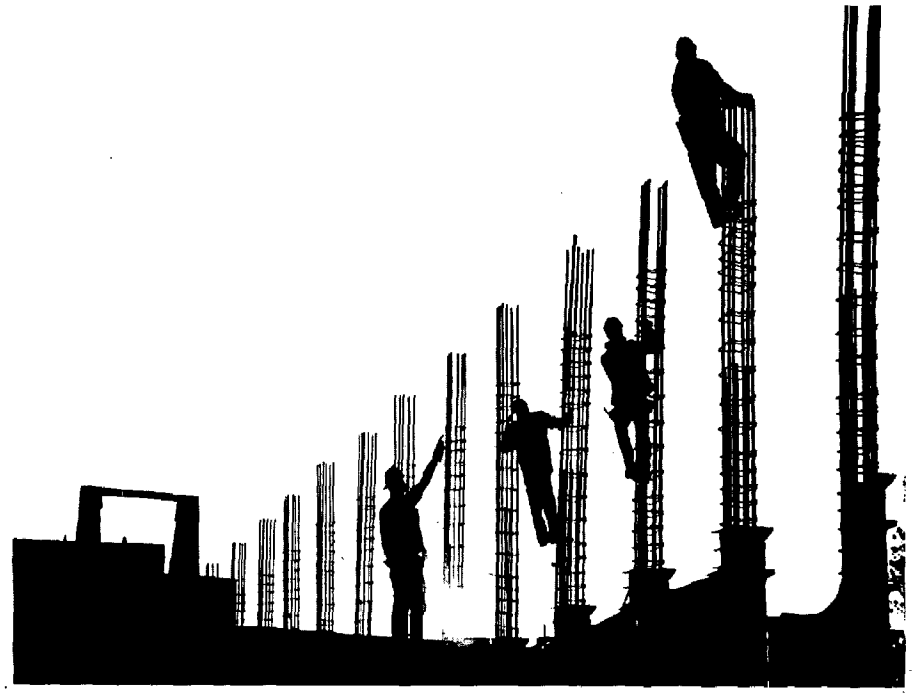
Commission Policy Recommendation

II. It be the policy goal of the State of Maine to cooperate closely with Canada in the development of transportation, energy and trade policies.

Possible Means Of Implementation

1. Give permanent status to the existing Office of Canadian Affairs and charge it with the responsibility of developing increased transportation and commerce with Canada, and providing assistance to Maine business and industry in locating market potentials in Canada, and assistance to Canadian companies whch might wish to relocate and/or expand in Maine.

Economic Development



Despite the popular belief that agriculture, tourism, and fishing comprise the principal economic activities of the state, Maine's economy is now primarily dependent on manufacturing. Slightly over one-third of Maine's employment is in manufacturing, and nearly three-quarters of the people so employed work in six industries, leather, paper, lumber and wood products, food, transportation equipment, and textiles.

In recent years, however, non-manufacturing jobs have been increasing at a faster pace than manufacturing jobs. For every manufacturing job, there are a large number of jobs created in the so-called service areas. These include everything from grocery store jobs, to positions in dry cleaners, drug stores, gas stations, restaurants, and insurance agencies, to name only a few.

Although efforts have been made in recent years to improve the state's economy which has traditionally been characterized by high unemployment, low per capita income, and a constant out-migration of career-aged people seeking jobs elsewhere, the state has gained little advantage over the rest of New England or the nation as a whole.

Yet, efforts to create more jobs for Maine people must be sustained. The commission believes a well-designed economic development strategy should take advantage of the following three options available to the state in order of emphasis:

1. Strengthening and expanding existing industry.

2. Encouraging more new business creation within the state.

3. Aggressively soliciting companies to relocate or expand in Maine.

The rationale underlying this suggested placement of emphasis is:

> that strengthening and expanding existing companies by offering them technical and management help has the highest probability of fastest return on the investment of time and money. Because they are already in Maine and many have deep Maine roots, they are unlikely to be lured away and thus will provide an even greater lasting value;
>
> that encouraging new business creation offers the possibility of developing a new generation of faster growing companies which will produce products with a higher "value-added" and a better mix of job opportunities with higher wages. There is also some evidence to indicate that increased new business activity has a leavening influence on the entire business community and stimulates more positive attitudes;
>
> that aggressively soliciting relocations and expansions into Maine should not be abandoned. It will become essential to be more selective in our solicitation, and competition from other states will increase. Looking at the long term, it is important to attract companies which have high probability of long-term residence.

Concern over Maine's economy has resulted in large expenditures of money and human effort. Most of the effort has been devoted to enticing industries to relocate in Maine, and not enough has been done either to strengthen or expand the activities of existing industry or to stimulate new business start-ups within the state. The responsibility for improving the state's economy must be shared by both the public and private sectors. The adoption of definitive policies relating to economic development, a focus on realistic opportunities for the state, and the provision of adequate funds to improve the state's economy would seem to be the key to better results.

"Maine should have a diversified economy emphasizing small and medium size industries."

"Make economic principles a required high school course . . ."

"Need clean industry that can operate in balance with our environment . . ."

"Encourage small-scale industry. Don't worry so much about attracting industry to Maine . . ."

"Would like to see state help for Maine citizens in finding markets for their products — as well as informing the public about them . . ."

"Greater utilization of in-state businesses rather than importing out-of-state industry might be best here . . ."

Commission Policy Recommendation

I. **It be the policy goal of the State of Maine to give greater priority to vocational, management, and liberal arts programs which will strengthen the ability of individuals to realize their greatest employment potentials.**

Possible Means Of Implementation

1. Require that educational institutions contribute more effectively to Maine's economic needs by (1) using their facilities year-round, (2) shortening the time required to develop new curricula so that schools can respond more quickly to changing labor force needs, (3) retraining workers with obsolete skills, (4) designing work-study programs.

2. Study the value of sharing with businesses the cost of on-the-job training and apprenticeships in selected skills, including, but not limited to, farming, fishing and lumbering.

3. Whenever an occupation or industry is disproportionately concentrated in one region of the state, training for that occupation or industry should be done by the University of Maine campus or vocational-technical institute in the region.

Commission Policy Recommendation

II. **It be the policy goal of the State of Maine to direct the state's economic development efforts toward the achievement of a balance of labor-intensive, capital-intensive, manufacturing and non-manufacturing industries, but with particular attention to industries related to the state's renewable natural resources and to the maintenance of a clean environment.**

Possible Means Of Implementation

1. Place as much emphasis on the attraction of non-manufacturing firms (other than trade and utilities) as manufacturing firms.

2. Make a particular effort to attract enterprises that develop and use those natural resources currently underutilized.

"More emphasis on jobs related to using and replenishing Maine's natural resources: e.g. making wood furniture instead of paper . . ."

"The economy of this nation is in terrible condition. Maine should strive to be self-sufficient . . ."

"Tax incentives to attract and develop new business . . ."

"Keep Maine different — preserve its traditional culture, encourage small primary industry . . ."

"Clean industries . . ."

"I have been appalled by the lip-service approach to new business by government, and especially Maine bankers . . ."

"Promote labor-intensive industry."

Commission Policy Recommendation

III. It be the policy goal of the State of Maine to give particular attention to strengthening the capacity of Maine's higher education institutions to render both technical and management assistance and services to the people, businesses, and industries in Maine.

Possible Means Of Implementation

1. Provide adequate funding to strengthen existing programs within the University such as the Project for Balanced Growth at UMO and the New Enterprise Institute at UMPG as well as other new projects which may come into being and which provide the same sort of direct service to existing and new industry.

2. Provide funding to assure through the Maine Public Broadcasting Network the availability of courses in marketing, engineering production, and management to companies on a cost basis conducive to encouraging greater management education in Maine companies.

Commission Policy Recommendation

IV. It be the policy goal of the State of Maine to give priority attention to aiding the development of the state's tourism, recreational, cultural, historical, and scenic resources for the benefit and enjoyment of Maine citizens and visitors.

Possible Means Of Implementation

1. Permit municipalities to create historic and scenic roadways.

2. Create a State of Maine trust fund for the purpose of purchasing and keeping within Maine valuable works of art, antiques, or historic properties of significance. Such a trust fund could be created as a quasi-public entity fed by private charitable donations supplemented by an annual state income allocation. Enact legislation allowing any citizen to voluntarily direct $1.00 of income tax paid to the state to be dedicated to this fund.

3. Expand the bookmobile system.

4. Encourage annual cultural exchanges with other countries and other states.

5. Ensure that the State Museum is more adaptable to Maine people and visitors in its hours, its programs, and its educational outreach.

"Tourism should be one of Maine's greatest resources. Industrial development may not have to be such a large part of our future if we can use the state's unequal resources for attracting tourists . . ."

"I feel more public lands and parks are needed . . . More state parks and camping facilities, especially along the coast . . ."

"Go easy on tourism ads in New England states . . ."

"Why was the 1973 tourism study shelved? It told the truth about which forms of tourism were most economically beneficial to Maine and which ones were least productive, but most annoying . . ."

"Do not promote tourism, it takes care of itself . . ."

6. Continue the policy which allows municipalities to acquire public access property through negotiation, tax delinquency, easements, leases, donations.

7. Educate public in care of public recreation facilities.

8. Publicize alternative sites to crowded coastal beaches (like N.H.).

9. Encourage outreach programs for those who because of poverty, isolation or handicaps cannot or will not become involved in leisure- time activities.

10. Establish a state-wide citizen committee on recreation to develop and exchange ideas, make recommendations to the Parks and Recreation Bureau, and assist municipalities with ideas and implementation.

Commission Policy Recommendation

V. It be the policy goal of the State of Maine to recognize the importance of and to encourage capital investment in the expansion of existing enterprises and in the creation and attraction of new ones.

VI. It be the policy goal of the State of Maine to maintain a regulatory climate, the objectives of which are clear, promptly executed, equitable, and the impact of which will be periodically reviewed.

VII. It be the policy goal of the State of Maine to assess its fiscal and tax policies in terms of their impact on business, industry, communities, and the individual taxpayer, and their effects on the climate for new capital investment.

Education

Elementary And Secondary

The Commission on Maine's Future believes that one of the most important keys to achieving a high quality of life for Maine citizens in the future will be the maintenance of a strong educational system at all levels.

It is clear that citizens are concerned by the rising costs of education, and are questioning whether the dollars spent are yielding commensurate benefits. This concern, undoubtedly always present, has been exaggerated more recently as the effects of inflation have been felt and taxpayers have been required to pay increasing taxes to support education. For example, between fiscal years 1955 and 1976, the level of state support for elementary and secondary education has increased from $7.8 million to $127.9 million. The projected state support of elementary and secondary education for 1978 is $168 million. Numerous factors have caused this to happen, including significant building of physical facilities, programmatic changes which have provided more individualized instruction, and improved teacher compensation.

As these costs have risen, citizens have looked more closely at programs, and when they have not perceived improved student skills, have become increasingly critical of the educational system.

In fairness, however, the commission notes that education of a child requires a close partnership between the home and school, with each partner equally responsible. Only when the parents and the teacher work cooperatively to motivate and discipline the child can optimum benefits be gained. If one or the other partner abdicates responsibility, educational quality suffers.

The future quality of life of Maine people will be determined by the quality of education available to them. They must, in their elementary and secondary years, receive a strong basic education and develop strong communication, reading, and mathematical skills. To accomplish this, the partnership between school and parent is paramount in importance and each must become an extension of the other. Broad citizen participation in the design of programs and policies of the schools should be encouraged, and, while minimum standards should be imposed, encouragement should be given to the local communities to develop the curricula which most effectively will fulfill local expectations of education.

All youngsters should not be automatically headed down the college or university trail. Dignity and respect must be accorded vocational education and the quality of such education must receive as much support and attention as the college curriculum.

Higher Education

Private Institutions

In Maine there are twelve private institutions of higher education. There are also a number of private, post-secondary institutions offering more specialized curricula. The commission recognizes the great value of these private institutions and believes that public policy should, at all times, recognize their importance and do everything possible to preserve and strengthen them. Nevertheless, the commission has refrained from including them under its public policy considerations, although, parenthetically, it believes that the current STEP program, which assists Maine students to attend private institutions should be not only maintained, but expanded.

University Of Maine

The University of Maine system is a young system, having been formed in the late 1960's by the merger of the University of Maine and the State Teachers Colleges. Predictable problems resulting from such an extensive merger have had to be confronted and much remains to be done before the

system's most effective operation can be achieved. Progress has been and continues to be made, however, and the commission feels that the University is deserving of strong support in its development.

The commission believes that the University's role in the development of the state is of utmost importance. It must be encouraged to become the focal point of new ideas, new technology, and the highest quality of educational opportunity. Opportunities exist in such fields as natural resource protection and development, agriculture, fisheries, energy, transportation, housing, and health education for University leadership and significant public service. Extension of the various technical and management training capabilities of the University to the businesses and industries of the state could make an important contribution to the economic well-being and development of Maine.

To accomplish such a role, the University must be funded adequately. Financial support should not be given blindly, but it should be adequate to permit the University to keep and attract top quality faculties and to develop research, development, and outreach programs. It is a resource of the highest potential and should be developed fully.

Vocational-Technical Institutes

Vocational-Technical Institutes in Maine have achieved a notable record of success and like the University represent a most important resource to the development of Maine. The quality of education provided by them is best exemplified by the fact that job placement is achieved for well over 85% of all graduates. Applications, numbering twice the number of students who can be admitted, attest to the value they are accorded by citizens.

Like the University, VTI's are deserving of substantial and increased financial support because of their importance to the economic growth of Maine. Salaries of faculties are not comparable to similar ranks in other institutions of higher education and should be increased to ensure keeping and attracting top quality teaching personnel.

Commission Policy Recommendation

I. **It be the policy goal of the State of Maine to ensure that there are strong and varied opportunities at all educational levels for Maine citizens of all ages.**

Possible Means Of Implementation

Elementary and Secondary

1. Require achievement of academic competency at all grade levels as a condition to promotion to the next grade level.

2. Consider alternatives to present teacher certification requirements to ensure ability to utilize most competent teaching skills available.

3. Increase regional vocational school development to gain the advantages and economies of scale.

4. Improve guidance-counseling services at all levels, including, but not limited to, career and vocational guidance by counselors who are current in their knowledge and contact with the work-a-day world on a reasonable counselor-student ratio.

5. Encourage parental involvement in the school system by requiring local citizen input as part of the accreditation process to evaluate the degree to which schools are satisfying local expectations.

6. Encourage expansion of high quality adult education for academic credit for those who wish to fulfill rerquirements for college or university matriculation.

7. Encourage greater local autonomy in determining local curricula and programs by establishing minimum guidelines at the state level and leaving to the community the right to determine the final details.

University of Maine System

8. Encourage and provide funds, if needed, to implement suggestions regarding student access, transfer of credits, and the structure of the University system, as recommended in the March 1977 report of the Trustees *ad hoc* Committee on Academic Planning.

9. Encourage the University to offer associate degree programs in liberal arts on all campuses.

"More state aid to the vocational-technical institutes . . ."

"Push return to basics in reading, writing and arithmetic in elementary schools . . ."

"Better use of our school buildings for other activities . . ."

"Hire teachers based on intelligence, motivation and creativity — forget certification and School of Education requirements . . ."

"Need more positive parental involvement . . ."

"No one should be allowed to drop out of school until he can read, write and do basic math . . ."

"Very little incentive for bright students . . ."

10. Extend a baccalaureate engineering degree and an opportunity for post-graduate engineering education to University of Maine campuses, where needed.

11. Fund centers for practical and applied research of problems presently and potentially confronting Maine and increase research and technical-assistance capabilities at University campuses.

12. Increase University tuition for those who can pay, but simultaneously ensure adequate scholarship funding for financially deserving and academically qualified students.

13. Increase University funding to ensure more competitive faculty salaries and the ability to attract and keep top quality professors.

Vocational-Technical Institutes

14. Provide more adequate funding to permit VTI's to train students for the more sophisticated, high technology industries even though the primary markets for such training may presently be out-of-state.

15. Expand vocational-technical educational programs for women.

16. Allow VTI's sufficient freedom and flexibility to ensure they can emphasize education in the fields most critical in their separate regions and can adjust curricula rapidly as conditions change.

17. Require close cooperation between VTI's and the University of Maine, including interchangeably acceptable credits in comparable degree programs.

18. Fund VTI's sufficiently and release the VTI's from the state personnel system to permit faculty salaries commensurate with salaries paid faculties at other institutions of higher education.

"Stop adding to the education burden by expecting public education to be all things to all people . . ."

"Need for more advanced degree programs, especially at the Ph.D. level . . ."

"De-emphasize four-year college. Emphasize vocational-technical . . ."

"Even the University of Maine has to be rated as a glorified high school. UM graduates cannot read or write properly — a generalization with some exceptions — but not many . ."

"Who tests the validity of the testing instrument?"

"Don't keep knocking down the university. Give it the budget to do a real job, and to keep top-notch professors in all fields . . ."

Human Needs

Human services can take the form of an adoption by a middle-class couple, an alcoholic receiving treatment or the parents of a mentally retarded child receiving specialized help.

At one time or another most of us will use or need some type of human service program, although to many people, human services are categorized as expensive welfare or public assistance programs.

In Maine, we are primarily concerned with those programs administered or supervised by the State Department of Human Services, Mental Health and Corrections, Manpower Affairs, and the Community Services Administration. There are also a number of federally operated programs in housing, income support, health, and many other areas. Additionally, there are a large number of private voluntary human services agencies. It is a complex and massive system.

During periods of economic decline the demand for human service programs will tend to increase while the tax revenues supporting those programs

tend to decline. Thus, just as the ability to support these services becomes more difficult, the demand for them is greatest. There is no doubt that without federal support of our human service programs, Maine would find it very difficult, if not impossible, to fund even the most essential human services.

Maine does a creditable job of providing human services needed by its citizens. However, there are many problems, not unpredictable, in a system as large and complex as human services. They include:

1. Lack of a Coherent Policy

   Constantly evolving state and federal philosophies have caused the somewhat haphazard organization of human service programs. Decisions by the U.S. Congress, the State Legislature, executive orders, bureaucratic rule-making, administrative interpretation, and the courts all have their impact on the form and extent, as well as the organization, of human services.

2. Administrative Fragmentation

   Because of the separation and confusion of funding sources and the variety of agencies and levels of government involved in the delivery of these services, there is serious administrative fragmentation. This can lead to a duplication of services, lack of coordination among agencies, increased administrative costs, and conflicting policies.

3. Increasing Financial Pressures

   General inflation of administrative costs, cost-of-living pressures on low income groups, increasing family breakdown, and rising crime all create extraordinary financial pressures on a state, which, with its small population and relatively static economy, is already limited in its resources.

4. Lack of Current, Accurate and Usable Data to Define Needs

   It is difficult to obtain information that is current, accurate, and usable in Maine to identify and assess the needs and priorities for services. Because of the number and variety of agencies and the different levels of government which administer human service programs, information or data regarding the success of our programs is fragmented, if available at all. In addition, this lack of a centralized, usable data source makes it difficult to determine accurately the need for human service programs in Maine.

Anything done to improve the ability to respond and deliver human services efficiently is going to require a long-term and arduous effort. Modifications of the human service delivery system should occur to make improvements. They should not disrupt services. While any change will be expensive in the short-term, it should be made only when it assures long-term economic and social benefits.

Commission Policy Recommendation

I. **It be the policy goal of the State of Maine to organize its human service delivery system within a coherent policy framework and to realign its administration to achieve maximum coordination of all programs.**

Possible Means Of Implementation

1. Continue efforts of government reorganization to bring human service agencies under a single administrative management system and to develop a comprehensive plan for coordinating the joint public-private delivery of service.

2. Develop a voucher system whereby those in need can purchase social services from the private sector when, to so do, such services can be rendered on a high quality basis and less expensively than by staffing state government agencies to furnish them.

3. Seek greater citizen input to determine which services are most needed, region by region, and to evaluate effectiveness of services being rendered.

Commission Policy Recommendation

II. **It be the policy goal of the State of Maine to ensure that all human service programs be designed to encourage and enable people to become as self-reliant as possible while still assuring quick and adequate response to the aged, disabled, handicapped, or those otherwise unable to subsist without assistance.**

Possible Means Of Implementation

1. Review all programs and regulations to ensure elimination of provisions which discourage or impede the desire or ability to achive individual independence.

2. Review all laws and/or regulations and eliminate any provisions which encourage the disintegration of the family unit.

3. Place greater emphasis on self-help programs, in which marketable skills of all types are developed and job placement occurs.

4. Require that all able-bodied people receive public assistance only in the form of wages for work performed either for the town, county, state, or private sector.

5. Encourage development of more or better day-care facilities to permit parents the opportunity to work or continue education.

"There are too many social services now with too many people misusing them . . ."

"More adequate assistance for those with proven need . . ."

"Needs to be reorganized and focused on prevention . . ."

"Social services yes — but scaled down enough to get people working again . . ."

"A closer control is needed . . ."

"An atrocious mess — nobody seems to know what's being done or why . . ."

"Close loopholes and require work of welfare recipients . . ."

"Too many give-away programs . ."

"Provide more incentives for people to work . . ."

6. Strongly encourage the enforcement and improvement of the rights and abilities of the handicapped individual to become a recognized and useful member of society.

7. Institute programs in family planning, and provide education in consumer economics and family budgeting, integrating in such programs nutrition education.

8. Expand the foster home program to ensure ability of immediate placement for abused or neglected persons.

9. Provide facilities on a county basis to provide adequate and attractive facilities for homeless or abused children and young people.

10. Establish coordinated statewide handy person and homemaker services, encouraging the use of the elderly in the provision of such services.

11. Develop appropriate alternatives for the elderly utilizing their knowledge and resources such as volunteer work or part-time employment in nursing homes, schools, libraries, playgrounds, hospitals, community projects, day-care centers, handcrafts. In each area these alternatives should exist without tax or social security discrimination.

12. Develop self-help systems among the elderly, such as Right to Read, VISTA, Gray Alliance.

13. Encourage a consolidated and coordinated transportation system for the elderly which responds to their needs.

"Greater care in handling welfare mothers . . ."

"Additional enforcement needed for social service program violators."

"Need greater compassion for human need. Faster assistance . . ."

"Services should be locally provided with state money . . ."

"Help the real needy more — sharply reduce services to others . ."

"Better information on current services sent out to citizens . . ."

"Way too much red tape . . ."

"A greater focus on the needs of the elderly and handicapped would be good . . ."

"We have too much welfare now . ."

Housing

A place to live is accepted as a necessity of life and a right to which all Maine people should be entitled. Over the past three decades, increasing personal income and low-interest, government-insured loans have encourage home ownership, and the number of owner-occupied homes has increased significantly. In 1970, about 62.5% of all housing units in Maine were owner-occupied. This is comparable to owner occupancy nationwide, which was 62.9% in 1970. During this period, consumer expectations have increased to include a variety of appliances, conveniences, and a garage as basic housing components.

Over the past 30 years, almost universal automobile ownership, cheap energy, and extensive highway construction have significantly reduced the time and relative costs of travel, thus opening a wider range of places to live with convenient access to employment. As a result, the dispersal of housing has accelerated, taking advantage of slightly lower-cost housing and services in the more rural areas. Additionally, low-interest housing loans and highway policies

have been the major contributors to the spread of housing into rural areas over the past three decades.

Housing costs are escalating rapidly beyond the means of many prospective homeowners. At the same time, demands for housing are just reaching new highs, as people born during the peak birth years of the 1950's are seeking housing. The result may be a demand that exceeds supply, with those at the low end of the income scale being most severely affected.

It is of concern in a state in which per capita and household incomes are low to consider predictions that by 1982, typical, new, single-family housing units now costing $45,000 will be selling in the neighborhood of $78,000, and that the costs of ownership will increase even more rapidly. The implications of these predictions are serious when it is realized that the poorer third of Maine's population has already been priced out of the conventional housing market.

In 1965-66, the poorer third of the population purchased 17% of all new houses. Today, only 4% are sold to these families. These statistics have ominous implications for the more than 60% of Maine families who cannot afford to purchase single-family housing, as this trend is likely to continue in the future, causing extreme hardships for Maine's poor and elderly.

One further element relating to escalating housing costs in Maine is the very rapid increase in the cost of land. Land prices, particularly in the rural areas, are increasing at very rapid rates. This is caused by several factors:

the migration from urban to rural areas, causing increased demand and consequent rises in price;

the Farmers Home Administration, which financed two-thirds of all mortgages last year, has stressed a policy of rural home purchases and construction;

inflationary pressures;

population increases;

increasing requirements and standards as a result of government regulation.

There have been few periods in history when land prices have dropped. So, there is little reason to believe that prices will not continue to rise in the future. This is significant, since rural homes with lower land prices have traditionally been less expensive, thereby making them more affordable to the less affluent. Also, as land and housing costs rise in rural areas, rents will do likewise.

But all is not hopeless for Maine people. According to the 1970 census, Maine had 339,440 year-round housing units. Of these, approximately 57,000 units, or 17% of the total housing stock lacked plumbing or were overcrowded. Although no data exist on other deficiencies, it is safe to assume that

a considerably larger portion was in need of wiring, essential repairs, structural work or other rehabilitation to prevent deterioration and ultimate dilapidation or loss of the housing unit.

We must make a major effort to preserve, protect, enhance, and make adaptive use of our existing structures. Particular emphasis should be placed on rehabilitative services and loan programs for the low-income and elderly. Often they have the greatest need for repairs, while being unable to afford the most basic of repairs to keep their houses safe, warm, dry and sanitary. It is in this area that we believe the highest priority for housing services should be placed.

When one looks at Maine's housing situation, several facts emerge:

state government's ability to alter significantly the broad trends of housing is limited;

the state can at best only attempt to ameliorate severe housing shortages;

the bulk of Maine's current housing programs does not appear to reach the really low-income families;

Maine has an urgent need for a centralized, comprehensive bank of housing data.

First and foremost, adequate housing is an important element in the total quality of life of Maine people and, as such, is deserving of constant attention and continuing evaluation of its adequacy and quality by state government. Better data are required than that which are now available and standardized reporting of new housing construction, renovations, and demolitions should be provided to the state government by municipalities on a regular basis.

Commission Policy Recommendation

I. **It be the policy goal of the State of Maine to organize its housing programs within a coherent policy framework, to achieve maximum coordination among all agencies and programs, and to ensure that such programs give priority to energy-efficient housing and the preservation of existing housing units.**

Possible Means Of Implementation

1. Encourage the allocation and use of funds and loan programs to repair and rehabilitate existing housing units.

2. Support, through our Congressional delegation, the dissemination of federal grants to Maine communities for the purpose of helping communities develop programs to rehabilitate existing houses, and convert existing unused structures to housing units.

"Explore alternative housing systems . . ."

"Cluster housing . . ."

"Develop tax incentives for energy conservation, alternative energy concepts etc. . . ."

"Farmers' Home has been a disaster . . ."

"Subsidize housing improvement which will conserve energy . . ."

"It isn't fair to jump homeowner's taxes way up when they make renovations . . ."

"Tax incentives for repairs etc. sounds great. You can't help people who refuse to help themselves . . ."

"Incentives for those building their own homes without bank assistance . . ."

3. Prepare a model building performance code which stresses energy efficiency for use by Maine communities, and encourage its adoption. (only 39% of Maine communities have building codes.)

4. Develop as part of the curriculum within the Regional Vocational-Technical system a course to teach new concepts relating to energy conservation, energy alternatives, and home building and repairing techniques.

5. Make courses available to building contractors and bankers so as to increase their awareness and acceptance of new technologies in housing construction.

Health

There is little evidence to suggest that the majority of people in Maine regard health or health services as matters of urgent concern or high priority for decisive action. Recent questionnaires report consistently a high majority have had at least one contact with their doctor in the previous twelve months, are generally satisfied with their care, though increasingly worried about costs, and do not regard their own health as a particular problem.

Health costs in Maine have been steadily rising, though at a slower rate than in the nation or in New England. Nevertheless, they are an increasingly serious concern.

Distribution of health services and personnel in Maine relative to the population is far more favorable than is popularly believed. Fewer than 15% of the total population of Maine live more than twenty miles from a practicing physician, and fewer than 24% of the population live more than twenty miles from a community hospital.

Over the years Maine has lagged behind the nation in the rate and extent of specialists replacing the general practitioner. As a result, we soon may be leading the nation proportionally in the number of family physicians in practice.

Maine has made a promising start in the field of health education with the programs developing at the University of Maine at Farmington. In the years ahead, these programs deserve special attention and increased public support and participation.

It is the conviction of the commission that there are compelling reasons for Maine to assert a major role in the design of health services in the state, in the evaluation of their scope and quality, and in the persuasion of Maine people through health education to participate more fully in the responsibility for their own health.

The emphasis of the future must increasingly become preventive medicine, health education, and continuity of patient care. Such changes will be hastened as health costs rise and comprehensive service coverages are extended to more people.

Teaching the individual greater respect for the body and greater understanding of what it can and cannot tolerate will lead to better lifestyles and less illness. Maximum possible coverage with appropriate immunizations, and fluoridation of public water supplies would seem to be obvious, short-term goals. Identifying health problems in early stages and providing early treatment will go far to reduce the need for hospitalization, and thus, be a depressant of costs.

It seems inevitable that in future years health services in Maine will develop and implement the roles of physician assistants. For their optimum use, however, there remain some very complex problems, such as the redefinition of legal, professional, moral and insurance responsibilities.

Finally, over the years ahead, it seems highly probable that office practices of physicians and dentists, emergency medical service systems, ambulatory care clinics, home health services, mental health and rehabilitation services, and long-term institutional care will become oriented to community-wide health service areas. They will also become increasingly linked to the community hospital by location, by communication, and by sharing of patient records.

Professional education in the health fields in Maine has been thoroughly studied and discussed in recent years. For physicians and nurses this has been traditionally a primary responsibility of the professions themselves, and until federal funds became more available, it was largely financed by a few health service institutions. As a result of the decision in 1976 not to establish a school of medicine in Maine, opportunities must be created for Maine residents to enter the health fields and to practice in Maine. The rising costs of such educational programs and the uncertainty of continued federal funding for current and developing courses are issues which must be resolved.

One alternative suggested to the commission which deserves early consideration is the investment of state funds in several vital programs in Maine. These include basic medical education, internship, residency programs, and nursing education. Additionally, funding of the University of Maine should be ade-

"I think there should be a national health plan . . "

"More home care of invalids and elderly by trained visiting people would help . . ."

"Do not centralize health care. Some of us who live in rural areas want to stay close by, whether we are sick or not . . ."

"More para-professionals, fewer over-specialized professionals . . ."

"We must have some kind of comprehensive health care which we can afford . . ."

"Increased emphasis on prevention — and on birth control . . ."

"With the shortages in health care, we can lick this only by nutritional education . . ."

quate to ensure its essential role in development and coordination of educational programs in the health field, and appropriate emphasis should be placed on contracts with other states for education in the health fields for Maine residents.

Commission Policy Recommendation

I. **It be the policy goal of the State of Maine in allocating public funds to the health field to emphasize the maintenance of good health, the prevention of disease and disability, the improvement of health service delivery, and health planning to contain rising health costs.**

Possible Means Of Implementation

1. Establish and fund a Maine Center for Health Statistics having a data system compatible with that of the National Center for Health Statistics. The purpose of such a center would be to determine the health status of Maine people and effectiveness of health services and diagnostic and health facilities in improving the health of our citizens.

2. Give a high priority to the quality and availablity of public education in the maintenance of good health and in preventive medicine.

3. Establish, in the very near future, emergency care facilities, assuring statewide access to rescue services and/or citizen-training programs in emergency care.

4. Stimulate the development of health insurance programs which provide adjustments in premiums for such factors as an optimum immunization record, appropriate weight maintenance, and (if verifiable) moderation or abstinence with respect to tobacco, alcohol, and drugs.

Government

Perhaps at no time in history has government at all levels had as much influence in the daily lives of Maine people as today. While there is clear evidence of citizen unhappiness with this growth and dominance of government, it is equally apparent that it has occurred as a result of ever-increasing citizen demands that government provide more services and solve more problems through legislation.

As government has grown, access to its functions has become correspondingly difficult, with the result being that one increasingly hears government referred to as **it** or **they** instead of **we.**

There can be no question that the increasing complexity of the problems of society has caused government to grow so dramatically in size and dominance. It is also clear to the commission that it is the growing belief of Maine citizens that government is becoming more remote, and this must not be ignored.

We in Maine have a tradition of government that recognizes the value of the individual. Although our future government may become more complex, more costly, and may interfere more with our individual freedoms, the commission strongly believes that the individual should have access to government at all times, and that government should constantly strive to enable citizens to understand the broad issues, and make real choices through voting.

It is imperative that as Maine's population increases, careful consideration be given to changes in government structure and functions which might enhance its ability to deal with that growth more effectively. Simultaneously, the commission believes that Maine citizens must be encouraged to rekindle that spirit which motivated their forebears to keen interest and vigorous participation in the affairs of their government.

To encourage greater citizen participation, government must constantly evaluate and facilitate citizen access. This becomes increasingly important as government grows in size and complexity. Easier access to information and the strong encouragement to voters to voice reactions would do much to help citizens feel they are truly a part of government.

If greater citizen participation is desirable, it should be the goal of government to ensure that its affairs are administered as close to the individual as the public interest will permit. By so doing, not only will greater citizen participation be encouraged, but much will also be accomplished in overcoming the belief that government is remote.

Consideration of political institutions must allow for more effective government for both urban areas and sparsely settled townships. Because of the dispersed population patterns within the state and the inability of small units of government to cope with the problems of an increasingly complex society, the commission supports a strong and responsive middle level of government to administer those functions which are too costly for the municipalities, and which we do not advocate performing on a state-wide basis.

Although counties have always been a part of Maine's governmental structure, some of their traditional powers have been eroded. For example, the superior courts, once based in county seats, are now located in legislatively determined districts. County budgets have always required approval of the legislature; in fact, all county powers are derived from the legislature, and in many cases county government does not have the ability to undertake planning or a variety of functions essential to good government.

When the commission first considered county government, it was impressed by the strong beliefs of citizens that county government should be retained and strengthened. The commission, in response to strong citizen opinion that in many instances counties are too weak and ineffective, believes that county government should be converted to a council-manager form of government.

It would also seem desirable to review and redefine, where necessary, which services clearly must be the responsibility of state government and determine

to what extent other services could best be provided at the county or local levels.

As Maine's population increases so will the pressures on the judicial system, and it will be essential that the court system be prepared to administer equal and prompt justice to all. The commisson strongly believes that the citizens of Maine and the Maine legislature should continue to lend adequate funding and administrative support to the Maine judiciary to enable it to handle increased volumes of cases.

The commission further believes that management capabilities within the public sector should be strengthened. Government should constantly strive for better management. Clearly it should constantly attempt to make the most effective use of resources available within the constraints of the statutes. Although government operations are labor-intensive, the prospects for substantial replacement of manpower with capital equipment may not appear to be as great as they have been in profit-making activities. Consequently, productivity gains in government, in all probability will depend heavily on better use of the talents and energies of its employees, which is principally a management responsibility.

Finally, it would appear that there might be great benefits from a stronger public-private partnership. From the volume of legislation presented to each legislative session, it would seem that government is often being asked to solve problems which might better be solved by cooperative public-private action.

As Maine moves toward the twenty-first century, its public servants must be given the necessary tools to do their jobs and have the strong participatory assistance of their fellow citizens.

Maine people must reaffirm their individual responsibilities for good government. They must be encouraged to participate, and access to government must be made easier and more inviting.

Government must re-evaluate itself constantly. Leaders must make long-range planning a way of life. Strategies must realistically acknowledge the serious impacts that decisions made in other parts of the world and country can have on Maine.

Maine cannot afford crisis reaction. Neither, with its relatively limited resources, can it afford programs that do not have reasonable cost benefits.

Every means must be utilized to gain the greatest benefit possible for each dollar spent. Clear-cut priorities for any spending and measurable criteria for all programs must be established.

Commission Policy Recommendation

I. **It be the policy goal of the State of Maine to provide the opportunity for maximum citizen participation and access to political and governmental institutions at all levels, and to guarantee disclosure of political and governmental activities.**

Possible Means Of Implementation

1. Establish a legislative information service which provides through the use of a state-wide, toll-free telephone line:

   a. Constantly updated (at least one week in advance) and pre-recorded schedule for all legislative committee hearings and activities, providing as minimum information L.D. numbers, titles, sponsors' names, committees to which assigned, and the date, time, and location of hearings.

2. Establish a state information service utilizing a toll-free telephone line to provide general information as to the proper department or agency and the name of an individual to contact therein to any citizen who has a problem or need for information regarding government.

3. Encourage public and commercial television and/or radio coverage of important legislative sessions and executive press conferences. Such broadcasts could be taped and shown during convenient hours, so as to provide maximum public exposure.

4. Emphasize, through the educational curriculum, the individual's responsibility as a citizen in a democracy with emphasis on the actual witnessing of the workings of local and state government.

5. Continue to examine and maintain a strict code of ethics for lobbyists and for public officials, whether appointed or elected, and monitor its effectiveness.

6. Require that the use of single-member districts be expanded to include not just the legislature, but counties and other elected bodies, in order to obtain more accurate and responsible representation.

4. Review the Maine statutes to assure there is no legal discrimination against third political parties or non-party candidates.

Commission Policy Recommendation

II. It be the policy goal of the State of Maine to ensure that government be administered as close to the individual as the public interest will allow.

"Make public referenda binding . ."

"Create the office of Lt. Governor and have this person go into communities to hear their problems first hand and then report back to the governor and legislature."

"The county is closer to the towns than the state . . ."

"Reduce it by 50%. Government is the reason for all the problems in Maine and USA. Government spending causes inflation, inflation robs people of jobs, homes, good medical care at a reasonable cost, etc. . . ."

"The legislature should be reduced in number and consolidated into one body."

"There are far too many regulatory agencies . . ."

Possible Means Of Implementation

1. Establish at the legislative level broad standards, goals, and regulations, allowing the regional and local levels of government to determine how they can best be met. Regulations should be designed in terms of minimum requirements to allow greater local determination in their administration. Require public hearings before any regulations are promulgated by any agency.

2. Decentralize to the appropriate level the regulatory function of all departments or agencies having a regulatory authority so that:

   a. citizens can have easier access to all such agencies;

   b. regulations can be administered with greater awareness of diverse local conditions.

3. Encourage interlocal agreements and regional solutions to area-wide problems.

4. Encourage, through our Congressional delegation, federal policies to disseminate federal funds in the form of block grants and revenue sharing which will permit greater discretion at the state and local levels in the administration and distribution of such funds.

5. Continue the state revenue sharing program and institute a block grant program to fund units of government.

6. Establish uniform fiscal reporting and recording practices for all public expenditures at **all** levels of government.

7. Adopt a council-manager form of government for Maine counties to consist of the following:

   a. The county council would be the governing body and would consist of elected council members from single-member districts representing one or more municipalities within the county, on the basis of the one-man, one-vote rule. The role of the council would parallel that of a city council.

   b. Eliminate election of all other officials within the administrative structure (sheriffs and other county-elected officers would be appointed by the county manager with the advice and consent of the council). Judges of probate would be appointed in the same manner as other members of the judiciary.

"Increase "sunshine" laws at all levels of government."

"A lot of duplication of effort. Can't we streamline it? Make it cheaper to operate."

"Need more information on issues. The media tend to evaluate the news for us. Give the people the facts and let them make their own evaluations."

"People should be more interested and informed."

"I personally doubt the ability of many local governments to manage more government responsibility. I'd rather trust in the sophistication of government at the state level."

"Need small regional offices . . ."

c. The chief administrator under this form of government would be the county manager, who would be hired by the county council on the basis of his/her administrative training, experience, and qualifications. The county manager's role would essentially parallel that of a town or city manager.

d. County budgets would be initiated and approved by the county council. Thus, the voters and taxpayers of the county, who are paying the costs of county operations, would be granted the opportunity of decision-making in the budgetary process, through their elected representatives on the county council.

e. Increase the strength of the counties by delegating to them some responsibilities and authorities now solely the province of state government.

8. Review and redefine, where necessary, which services are clearly the responsibility of State Government, and determine at what level such services are best administered.

Commission Policy Recommendation

III. It be the policy goal of the State of Maine to ensure that all governmental institutions are organized with clearly defined goals, objectives, and functional responsibilities, and with greater accountability to the people and to organize its governmental institutions in a cost-effective manner.

Possible Means Of Implementation

1. Support "sunset" legislation with the requirement for a continual "management" study of state government employing professional assistance to review and evaluate all government departments in terms of their presently assigned responsibilities and with the objective of:

a. eliminating duplicative or mutually negative functions;

b. redefining missions;

c. redefining authority and responsibilities;

d. reaffirming organizational needs as to personnel;

e. consolidating or eliminating functions;

f. reviewing all advisory boards to state agencies as to their effectiveness and purpose.

"Provide higher salaries for legislature and provide for sabbaticals from industry to attract more participants . . ."

"Good control needed — fewer appointments made on the basis of 'knowing the right people' . . ."

"As a new resident here, your government red tape at the individual level is almost as bad as in New York . . ."

"Those who want to participate have easy access to all levels of government . . ."

"There is a clear need for creative administrators in government . . ."

"Less federal and state government would be great . . ."

"Voucher system — Only with good accountability and controls . ."

2. Permit no federally funded, special-purpose district to be created as separate from, distinct from, or unaccountable to units of representative government.

3. Adopt administrative procedures which would reduce the number of bills considered by the legislature annually. Urge legislators to cooperate in the drafting of similar legislation and to co-sponsor such bills.

4. Ensure that the joint standing committees continue to have an adequate, high quality staff. Staff would perform the important task of providing research on all issues, thus reducing the legislators' dependence upon lobbyists and special-interest groups.

5. Consider reducing the number of standing committees that any one senator is assigned to, and appoint House members as committee chairmen, if and when there is a House member as qualified in terms of experience and expertise as the ranking Senate member. This will distribute the responsibility and workload among both Senate and House members.

Commission Policy Recommendation

IV. It be the policy goal of the State of Maine to encourage to the maximum extent possible private solutions to public problems.

Possible Means Of Implementation

1. Make every effort to effect and encourage, through a broadly based educational effort, the need for more citizen participation, and whatever way possible rekindle the spirit of individual initiative *versus* government intervention. Reaffirm the importance of the private sector. Encourage individual and corporate responsibility in problem solving.

2. Give strong consideration to the establishment of a voucher system for the purchase of services from the private sector, instead of staffing state government to provide services which could be provided as well or better by the private sector. Clarify the state's responsibility to set public policy and ensure that such policies are followed, but recognize that the state cannot necessarily be the provider of all services.

Commission Policy Recommendation

V. It be the policy goal of the State of Maine to ensure that the Maine court system is always capable of administering equal and prompt justice to all.

"Laws should be changed so that our police can do their work in protecting us. At present the criminal is more protected than the private citizen . . ."

"Better use of tax monies . . ."

"An information system on all state agencies (LURC, BEP) and service to distribute it to everyone."

"What about the problems of our prison . . . overcrowded . . . underpaid and under-trained staffs. The master plan is just creating space that will be filled immediately. Let's do something more than simply maintain these people. It's there and very real . . ."

"Direct vote on issues which will result in more taxes and the use of those taxes."

Possible Means Of Implementation

1. Create a Commission for Judicial Review consisting of:

   a. the Chief Justice of Maine Supreme Court, who will act as chairman;

   b. three judges selected by the Chief Justice of the Maine Supreme Court, representing each of the court levels;

   a. three members of the Maine Bar Association, appointed by the Maine Bar;

   d. three citizens chosen by the governor (one from southern Maine, one from central Maine and one from northern Maine).

2. Such a commission should be charged with consideration of, but not limited to, the following:

   a. Creating a Judicial Nominating Commission for the Maine Supreme Court, the Superior Court and the District Court. This committee should be composed of:

      a member of the Supreme Court, chosen by the court (serving as the chairman, voting in case of a tie):

      three lawyers, nominated by an electoral process by members of the Maine Bar;

      four non-lawyers, nominated by the governor.

   b. Placing the probate courts under the state-wide court system and ensuring that probate judges are appointed in the same manner as other members of the judiciary.

   c. Evaluating periodically judicial salaries to ensure that they are equitable and that competent attorneys can be attracted to the "bench".

   d. Offering citizens the opportunity to select a night court option at the District Court level to avoid lost wages and afford greater convenience.

   e. Subdividing the functions of the District Court into specialized courts which need not be presided over by judges, and make use of para-legal personnel. (Explanation: It is not necessary for a judge to hear minor traffic violations.)

   f. Expanding programs for rehabilitation and assistance to the victims of crime.

g. Permitting greater discretion and additional alternatives in judiciary decisions regarding the disposition of cases. Exploring innovative alternatives in use in other states.

h. Appointing judges with a particular expertise, e.g., juvenile cases, divorce cases, etc., and allow them to concentrate on their particular field of expertise.

i. Eliminating the appeals process in cases of a minor traffic violation, consistent with maintaining the rights of individuals.

j. Ensuring that reasonable court facilities are available to all court levels.

Commission Policy Recommendation

VI. It be the policy goal of the State of Maine to exert the greatest possible influence on national policies to accommodate state and local priorities.

Possible Means Of Implementation

1. Encourage federal policies to allow for proportionate federal block grants to the state for dissemination to the needy smaller communities. (Current funding programs accrue mainly to the larger towns and cities while smaller towns must compete for "discretionary grants".)

2. Create a central data bank of information on ALL federal assistance coming into the state. Such a system could serve a dual purpose: (1) provide us with a constant monitor over federal support to Maine, its fluctuations, its duplications and any inconsistent program offerings. (2) provide all units of government in Maine, at the touch of a punch key, with information on what funding sources are available (including addresses, procedures, etc.) for particular needs that a governmental unit may have.

3. Institute a strong executive review and comment function in the Governor's Office, more fully utilizing the existing A-95 review system, to guard against the further creation of ad hoc, non-accountable governmental agencies, jurisdictions and boundaries. This would allow a determination of the impact of federal funds on state policy, and would permit programs to be developed in conformance with state policy, or even resisted in their entirety, if inappropriate.

4. Require that the state legislature refuse federal funds when the probable impact would adversely affect the state.

5. Do everything possible to relay to our Congressional delegation the need to develop innovative ways of applying federal laws and regulations without the universally detested mounds of needless paperwork.

Appendix A

Public Participation

The commission believes strongly that if its recommendations are to be credible, they must reflect the authorship and opinion of Maine people. The statute which created the commission called for "a description of the future of the state as envisioned by Maine people". Early in the commission's deliberations it began to concentrate on obtaining maximum participation from the citizens of Maine. Rarely is there any serious attempt to involve the people of Maine in the planning decisions which may affect their future. Thus, the commission set out to involve as many people as possible in its final decisions.

Public involvement ranged from commission members' speaking before as many as 90 diverse citizens groups to very extensive television time. WCSH (Channel 6) in Portland devoted four half-hour programs to the major areas of the commission's study. These four programs were followed by a one-hour evening "phone-in" program, which was also carried by WLBZ (Channel 2) in Bangor. Citizens from all over the state were able to hear a discussion of the commission's efforts, to ask questions, and to express opinions.

During the summer of 1976, WABI (Channel 5) in Bangor produced a one-half hour interview with the commission chairman.

The Maine Public Broadcasting System has dedicated a substantial amount of both TV and radio air time to commission affairs. In addition, there has been considerable press coverage of commission meetings.

Since September, the commission has conducted six "Futures Days" in the towns of Dexter, Lewiston, Waterville, Augusta, Bethel, and York. The purpose of these Saturday meetings was to expose Maine citizens to possible future events and to find out from Maine people how they felt about given issues. Questionnaires were distributed and the results analyzed to inform commission members how different regions of the state compared on each issue.

More than 150 experts in 60 different fields were invited to share their knowledge and views with the commission. A large volume of written correspondence and comments was received and considered. In addition, individual commission members sought the opinions of hundreds of Maine citizens throughout the state.

The contents of the commission's preliminary report served as the basis for a one-half hour film, "Maine: 2000, Can We Get There From Here?" This slide show became the focal point of an intensive, summer-long series of public meetings to which Maine citizens were invited to react and provide further input. A questionnaire was distributed to those who attended each public film showing, and the results were tabulated and analyzed. Thereafter, the commission re-examined its recommendations and developed its final positions. This provided Maine citizens with an opportunity to respond to the many alternative recommendations which the commission had under consideration.

The slide show and the preliminary report generated substantial public response. The commission held 108 showings of the slide program at public meetings in 94 towns throughout the summer months.

In addition, "Maine: 2000" was used in its entirety by both public and commercial television stations in Maine. Thus, the viewing audience of five television channels in Maine had a chance to see the program and to learn about the commission's activities and concerns.

The commission received over 1,700 completed questionnaires from Maine citizens. Besides answering specific questions on potential recommendations, the respondents also had an opportunity to make comments of their own on any issue of concern. (A number of these citizen comments appears on the left pages of this report.)

What follows are the results of 1,705 completed questionnaires which were returned to the commission.

Proposals Relating To Population Growth

	NO ANSWER	NO	YES
Should the state monitor population changes as part of its planning for the future?	5%	8%	87%
Would you support any of the following:			
Development of the tools to assist towns in preparing for and anticipating the impact of population growth	15%	9%	76%
Guidelines for use by any town wishing to conduct a census	22%	12%	66%
Annual state estimates of town populations	30%	27%	43%
A requirement that every town conduct a census every two years	24%	39%	37%
A state census for every town on a two-year basis	31%	40%	29%
Would you favor the development of a centralized data bank available to both public and private decision-makers?	7%	17%	76%
Would you favor the creation of a public organization staffed to accumulate the data from the above data bank and to evaluate economic, political and social changes?	10%	25%	65%
Should this organization be part of government?		NA	12%
OR	34%		
Should it be made up of a group of institutions of higher education?		NA	54%

Proposals Relating To Forestry

	NO ANSWER	NO	YES
Would you favor the state legislature declaring the state's forests a prime renewable resource?	9%	9%	82%

Would you support any of the following?

Making available (on a tuition basis) courses for small woodlot owners interested in better management techniques	9%	5%	86%
Extension through the University of greater technical assistance to private industries in new wood product development. This would assure forest products are put to their best use prior to being exported from Maine	11%	9%	80%
Expansion of the service forestry program to provide owners of small woodlots with increased management assistance	10%	13%	77%
State leadership in encouraging the formation of a *private* cooperative forest management company	23%	24%	53%

Proposals Relating To Fisheries

	NO ANSWER	NO	YES
Do you think Maine should provide further assistance to its fishing industry and increase its efforts to manage marine resources?	6%	7%	87%

Would you support any of the following?

Imposition of tighter controls on the harvesting of endangered or declining marine species	12%	7%	81%
Development of a long-range comprehensive management plan for Maine's fisheries to ensure adequate supplies in the future	13%	7%	80%
Develop improved patterns of marketing, including a daily fish auction, to improve prices received by Maine fishermen	18%	10%	72%
Financing by the state of the design and construction of modern fishing vessels in Maine boatyards for lease to Maine fishermen. This program would be self-supporting	13%	20%	67%
State-encouraged development of fully integrated ports to include wharves, processing, refrigeration, and storage facilities	16%	13%	71%

Proposals Relating To Agriculture

	NO ANSWER	NO	YES
Do you think Maine should encourage more farming within the state?	4%	4%	92%
Would you support any of the following?			
Modification of inheritance taxes to keep family farms in agricultural production	11%	7%	82%
Development of financial incentives to encourage young people to enter farming	13%	11%	76%
Research into the feasibility of growing produce in greenhouses heated by excess heat from utilities and industry	15%	17%	68%
Encouragement of the construction of facilities for the bulk storage of grains and fertilizers	20%	13%	67%
Replacement of the town property tax by a town income tax for farmers earning about half their income from farming	24%	26%	50%

Proposals Relating To Fresh Water

	NO ANSWER	NO	YES
Do you think Maine should increase its efforts to protect its fresh water resources?	2%	4%	94%
Would you support any of the following?			
Continue the present water clean-up programs	5%	3%	92%
Determine the extent of Maine's underground water resources	14%	10%	76%
Establish policies to ensure that population growth does not exceed the long-term availability of fresh water	14%	13%	73%
Encourage (through legislation and funding) the creation of river and watershed management districts where appropriate	16%	16%	68%

Proposals Relating To Energy

	NO ANSWER	NO	YES
Should Maine institute a well-defined state energy policy for Maine's particular needs?	6%	4%	90%
Should the state policy place great emphasis on energy conservation?	6%	5%	89%
Would you support any of the following?			
A state building code stressing energy conservation in all new or renovated public and private buildings	8%	13%	79%
Purchase of parking areas at strategic points along the Maine Turnpike, Interstates 95 and 295 to encourage car pooling and bus travel	14%	20%	66%
Reschedule all educational programs to reduce heat and electrical consumption during winter months	16%	30%	54%
Charge higher rates to consumers of large quantities of power	16%	36%	48%
Higher excise taxes on "second cars" not required for commuting to work	12%	49%	39%
If there is a *proven* need in Maine to construct more electric power plants, which would you support?			
Other hydro-electric projects	30%	14%	56%
The Passamaquoddy tidal project	26%	22%	52%
A nuclear power plant	12%	44%	44%
The Dickey-Lincoln Lakes project	23%	58%	19%
Greater reliance on other power sources			
Solar, wood, wind	10%	5%	85%
Coal	31%	27%	42%

Proposals Relating To Transportation

	NO ANSWER	NO	YES
Should Maine explore the possibility of developing more efficient means of transportation?	4%	4%	92%
Would you support any of the following?			
A mass transportation system within the "turnpike corridor" (where 70% of Maine's population lives)	11%	13%	76%
Development of coastal ship service for passengers and cargo	16%	20%	64%
Should Maine expand or improve the existing transportation system if it will improve the state's economy?	9%	8%	83%
Develop and expand the use of Maine's port facilities	13%	5%	82%
Expansion of existing roads to Canada to open Canadian markets to Maine goods	16%	30%	54%

Proposals Relating To Economic Development

	NO ANSWER	NO	YES
Are you of the opinion that economic development is a responsibility of the state?	12%	27%	61%
Would you support any of the following?			
Emphasis on the attraction and creation of industries which would make best use of the state's natural resources	11%	5%	84%
Assistance to help smaller communities to plan for economic development	14%	12%	74%
Technical and marketing assistance by the state or University of Maine to existing business and industry	18%	12%	70%
Tax incentives to attract and develop new business	15%	31%	54%
Establishment of a single, centrally located graduate School of Business Administration within the University of Maine	19%	31%	50%

Proposals Relating To Education

	NO ANSWER	NO	YES
Do you think that Maine's educational system is properly financed at the present time?	18%	54%	28%
Would you support any of the following?			
Acceptance of responsibility for and cost of greater local control of education	22%	18%	60%
Elimination of the uniform property tax as a means of equalizing education	24%	33%	43%
Continued regionalization of the educational system	24%	37%	39%
Do you think Maine's education system is doing an adequate job at the present time?	13%	60%	27%
Greater access to practical vocational and career-oriented education at all levels	8%	5%	87%
Testing for basic skills (reading, writing, mathematics) as a requirement to graduate from high school	7%	9%	84%
Changes in the present "super" university concept to include fewer four-year campuses and decentralization of administration	22%	33%	45%

Proposals Relating To Social Services And Health Care

	NO ANSWER	NO	YES
Should Maine consider making structural changes in its social service and/or health delivery systems?	19%	7%	74%
Would you support any of the following?			
Increased emphasis on preventive medicine (the prevention and early detection of illness)	11%	4%	85%

Requiring those receiving assistance (except in cases involving the disabled and the elderly) to perform some useful work for the state or community	11%	7%	82%
Expansion of health education	13%	8%	79%
Consolidation of social service agencies, administration and funding wherever possible	18%	14%	68%
Transfer of the responsibility and the cost of social service programs to the community level	20%	32%	48%

Proposals Relating To Housing

	NO ANSWER	NO	YES
Should the state do anything to provide more adequate housing for its people?	12%	21%	67%
Would you support any of the following?			
Tax incentives for renovation or improvements to existing homes	9%	14%	77%
A state-supported loan program for limited income homeowners living in homes which are in serious need of repair	13%	23%	64%
Encouragement of "cluster" home development near existing water and sewer lines	16%	30%	54%

Proposals Relating To Government

	NO ANSWER	NO	YES
Would you take advantage of easier access and a greater opportunity to participate in government at all levels?	15%	13%	72%
Would you support any of the following?			
Creation of a public information service which any Maine citizen could reach by toll-free telephone to ask questions about state services and regulations	11%	13%	76%
Establishment of a voucher system under which people eligible for state services would get help directly from the private sector in cases where it is cheaper for the state to pay for those services than to staff a government agency to provide them	16%	10%	74%
Transfer of more government responsibilities from the state to the local level	13%	15%	72%
Use of non-binding public referenda to let people express their opinions directly on important issues and legislation	15%	13%	72%
Strengthening county government and making it more responsive, representative, and providing it with professional management	18%	28%	54%

Explanation of Table

This summary covers all 1,705 questionnaires returned by the respondents.

The percentages shown for the Maine population for age, sex and place of birth have been adjusted to make them comparable to those of the survey respondents, 96% of whom were age 21 or older. The percentages shown for the Maine population for education refer to persons age 25 and older who have completed school.

One should note that the commission survey includes more non-native, high-income, college-educated males, ages 45-64 than does the general population.

Characteristics Of Respondents and The General Maine Population

	Commission Survey	Maine Population
Age*		
21-44	51%	50%
45-64	38%	32%
65 and Over	11%	18%
Sex		
Male	61%	47%
Female	39%	53%
Birthplace		
Born in Maine	51%	73%
Born Elsewhere	49%	27%
Length of Residence of In-Migrants		
Under 5 Years	31%	—
5-10 Years	29%	—
10 or More Years	40%	—
Education		
Did Not Attend College	21%	55%
Attended College, But Not Graduate or Professional School	46%	8%
Attended Graduate or Professional School	33%	3%
Household Income		
Under $12,000 Per Year	32%	46%
$12,000-$25,000 Per Year	45%	40%
Over $25,000 Per Year	23%	14%

* *Sixty-eight respondents were under age 21. The percentage these constitute of the total sample is not shown since we do not know with what age cohort in the general population to compare them. (That is, we do not know whether to compare them with the population 18-20 on the assumption that persons under 18 will not attend a public meeting or whether to compare them with the population 16-20 on the assumption that persons as young as 16 will attend such meetings, etc.) As a consequence, the percents shown refer only to the population 21 and over.*

Summary Of Citizens' Responses

In the questionnaires, Maine people expressed overwhelming support for a number of proposals. *Over 85 percent* were in favor of:

— monitoring population changes as part of planning for the future.

— providing further assistance to the fishing industry and increasing efforts to manage marine resources.

— encouraging more farming in Maine.

— increasing efforts to protect fresh water resources.

— instituting a well-defined energy policy for the state's particular needs.

— placing great emphasis on energy conservation.

— exploring the possibilities of more efficient means of transportation.

In addition, *more than 70 percent* of the 1,705 respondents also expressed agreement with:

— developing a centralized data bank to be available to both public and private decision-makers.

— the legislature's declaring the state's forests a prime renewable resource.

— expanding or improving its existing transportation system if it will improve the state's economy.

— having Maine consider making structural changes in its social service and/or delivery systems.

Over 60 percent of the people filling out questionnaires favored:

— creating a public organization staffed to accumulate data from a central data bank and to evaluate the economic, political, and social changes.

— taking steps to provide more adequate housing for Maine people.

Over 50 percent answered that they *did not think:*

— Maine's educational system was properly financed at the present time.

— Maine's educational system was doing an adequate job at the present time.

A total of *71 percent* of those answering the questionnaires said *they would take advantage of easier access and greater opportunities to participate in government at all levels if such access and opportunity were provided.* Perhaps that opportunity has now presented itself with the issuance of this report.

Appendix B

Speakers Who Addressed The Commission On Maine's Future

James Acheson
Anthropology, University of Maine, Orono

Jefferson Acker
Medical Directions Corp.

Mary Adams
Maine Towns for Fair Taxation

William Adams
Bureau of Forestry

William Adams
Department of Environmental Protection

Kenneth Allen
Interim President, University of Maine, Augusta

Richard Anderson
Maine Audubon Society

Edward Andrews
Maine Medical Center

Spencer Appollonio
Department of Marine Resources

Talbot Averill
Penobscot Valley Regional Planning Commission

Richard Barringer
Department of Conservation

Elmer Beal
College of the Atlantic

Eugene Beaupre
Mid-Maine Medical Center

Elizabeth Belshaw
Maine Court Administrator's Office

Dean Bennett
Department of Educational and Cultural Services

Charles Berg
Energy Consultant

Robert B. Binswanger
Vice-Chancellor, University of Maine

E.Temple Bowen
Department of Conservation

Raimond Bowles
Federal Law Enforcement Assistance Agency

Joseph Brennan
Attorney General

James Bright
Technological Forecaster

Robert Bundy
Syracuse University

Derek V. Bush
Maine Coastal Memorial Hospital

George Campbell
Town Manager, Dexter

Bruce Carlson
Standards and Goals Project

William Carney
Department of Human Services

Thomas Cathcart
Blue Cross-Blue Shield

Thomas Chappell
Kennebunk Chemicals, Inc.

Walter Christie
Maine Medical Center

Eton Churchill
Maine Public Broadcasting

Fred A. Clough, Jr.
Associated Industries of Maine

Charles Coffin
Woodlot Owner

Gene Coffin
Maine Truck Owners Assoc.

John Cole
Maine Times

William Cole
Nasson College

Eliot Coleman
Farmer

Douglas Collins
Family Medicine Institute

Michael Collins
Pinkham Lumber Co.

Henry Conklin
Pinkham Lumber Co.

Howard L. Cousins, Jr.
Bangor and Aroostook Railroad

Linda Cox
Maine Medical Center

William Cullinan
Edward C. Jordan Co.

John M. Daigle
Casco Bank & Trust Co.

David Davis
Bucksport

Ronald Davis
Botany, University of Maine, Orono

David Dean
Ira C. Darling Center

Vance Dearborn
Cooperative Extension Service, UMO

John Dexter, Jr.
City Manager, Saco

David Dixon
Rural Health Associates

Marshall Dodge
Specialist, Folk Art

Benjamin J. Dorsky
Maine AF of L — CIO

David Ells
Maine Criminal Justice Planning and Assistance Agency

Irving Fisher
Political Science, University of Maine, Portland-Gorham

Howard Foley
Criminal Justice, UMO

John Forster
Southern Kennebec Valley Regional Planning Commission

Sharon Francis
Massachusetts Tomorrow

Joseph Genco
Chemical Engineering, University of Maine, Orono

Harry Glassman
Justice, Superior Court

Cecil Goddard
Trustee, Maine Hospital Assoc.

Kathleen Goodwin
Maine Committee on Aging

Thomas Gordon
Cobbossee Watershed District

John Grant
Merrill Bankshares, Inc.

Frederick Greene, Jr.
Business Development Consultant

Stanley Hanson
Maine Health Systems

Daniel Harlan
Maine Department of Agriculture

Philip Harris
Maine State Planning Office

Sherman Hasbrouck
Cooperative Extension Service, UMO

Kenneth Hayes
Social Science Research Institute UMO

Robert Hellendale
Great Northern Paper Co.

Christian Herter
Natural Resources Council

Daniel Hester
Saco River Corridor Commission

Herbert Hidu
Ira C. Darling Center

Richard Hill
Mechanical Engineering, UMO

Vaughn Holyoke
Cooperative Extension Service UMO

Fred Holt
Bureau of Forestry

Charles Horne
Save the Milo Hospital Committee

James Howell
First National Bank of Boston

Frederick Hutchinson
Research & Public Service UMO

Mary Issac
Regional Health Agency

Doris Issacson
Maine League of Historical Societies

Philip Issacson
Maine Commission on Arts and Humanities

Philip Jackson
State Senator

Gerald Karush
Sociology, UMO

David Kennedy
Maine Farmers Coalition

Donaldson Koons
Geology, Colby College

Allen Leighton
Seven Islands Land Co.

Frederick B. Knight
Forestry, UMO

Carl Laws
Saco River Corridor Commission

Robert Locke
Maine Forestry Service

Joseph Long
Dentist

William H. Luginbuhl
College of Medicine,
University of Vermont

Joseph Lupsha
Maine Forest Products Council

Roger Mallar
Department of Transportation

Eugene Mawhinney
Political Science, UMO

Richard Mayer
Brunswick Police Department

Edward Mayo
Kennebunkport Dump Association

Patrick McCarthy
Chancellor, University of Maine

Thomas McGillicuddy
Small Business Administration

William McLaren
Portland Police Department

Edward Meadows
Seven Islands Land Company

John Menario
Portland City Manager

William Mendelson
Hillcrest Foods, Inc.

Woody Mercier
Department of Educational and Cultural Services

Edgar A. Miller
State Economist

H. Sawin Millett, Jr.
Department of Educational and Cultural Services

Charles Moreshead
Kennebec County Commissioner

Paul Mosher
Maine Potato Board

Forest Muir
Agriculture, UMO

Ray Nichols
State Probation & Parole

John Nickerson
Political Science, UMA

Einar Olsen
President, University of Maine, Farmington

John O'Sullivan
Department of Finance and Administration

Abigail Page
Office of Energy Resources

Scott Paradise
Massachusetts Tomorrow

Robert Peacock
R.J. Peacock Canning Co.

Samuel Pennington
Maine Antique Digest

Bradley L. Peters
Maine Central Railroad Co.

Thomas Pinkham
Pinkham Lumber Co.

Frank Piveronas
State Development Office

Louis Ploch
Agricultural and Resource Economics, UMO

Donald Powers
WCSH & WLBZ Television

Frank Reed
New England Feed & Grain Council

Robert Reny
Reny Department Stores

Jay Robbins
Federation of Cooperatives

John Robinson
First Bank, Farmington

Mildred Roche
Nurse Practitioner Program

Ralph Ross
Judge, Maine District Court

John Rosser
Department of Mental Health and Corrections

Bruce Rothenburg
Maine State Housing Authority

John Salisbury
Maine Municipal Association

Charles Saunders
Fisherman

Philip Schenck
Town Manager, Farmington

Frederick Schwartz
Physician

Edward Scott
Dairy Farmer

Charles Sharpe
Maine Criminal Justice Planning

John Sinclair
Seven Islands Land Company

John Shaw
Maine Committee on Aging

Earle Shettleworth, Jr.
Maine Historic Preservation Commission

David Smith
Maine Department of Human Services

Stewart Smith
Potato Farmer, Economist

Ralph Snow
Bath Iron Works

Edward Sprague
U.S. Forest Service

Francis B. Sprague
Eastern Maine Vocational-Technical Institute

Mary Lou Sprague
National Trust for Historic Places

David Stanley
Union Mutual Life Insurance Co.

Kenneth Stratton
Land Use Regulation Commission

David Strubel
Maine Forestry Service

R.A. Strucktmeyer
Plant & Social Sciences, UMO

Mary Sullivan
Rockland Gazette

Clifford Swenson
Seven Islands Land Company

Richard Thayer
Sheriff's Office, Cumberland County

Elwin Thurlow
Central Maine Power Company

Ancyl Thurston
Maine Forestry Service

Gerry Towle
Maine Salmon Farms

Katherine Tracy
H.O.M.E.

Theodore Trott
Maine Criminal Justice Planning & Assistance Agency

Rex Varnum
Dairy Farmer

George Vogt
Regional Health Administration, PHS

Allen Weeks
Maine State Police

Daniel Willett
Saco River Corridor Commission

Jane Willett
Saco River Corridor Commission

James Wilson
Anthropology, UMO

Morris Wing
International Paper Copany

Frank Woodard
Civil Engineering, UMO

John Wuesthoff
Saco River Corridor Commission

Robert O. Wyllie
Bureau of Social Welfare

Chaitanya York
Maine Organic Farmers and Growers Association

Harold Young
Forestry, UMO

Appendix C
Financial Report

Federal Cost Available

— HUD and NOAA contributed (Fed. Cash): Toward Policies and Futures Planning:

	HUD	NOAA	Total
FY 74-75	$30,000		$30,000
FY 75-76	$30,000		$30,000
FY 76-77	$22,500	$10,400	$32,900
FY 77-78	$ 4,700		$ 4,700
Total:	$87,200	$10,400	$97,600

Total Funding by Source

Federal Cash (see above)	$ 97,600
add: EEA & CETA — Cash Department of Labor — Federal	$ 54,429
Total Federal	$152,029
State appropriations to CMF	$ 70,000
Total Federal & State	$222,029

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COASTAL ZONE MANAGEMENT PROGRAM

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no.105

LEGAL AND ADMINISTRATIVE INVENTORY

Technical Report 105

Feingold, Eugene M.

HC167.I6I48 1976 no. 105 c.1

LEGAL AND ADMINISTRATIVE INVENTORY

Technical Report 105

Prepared By:

Eugene M. Feingold
Munster, Indiana 46321
Legal Consultant

September, 1976

Submitted To:

Indiana State Planning Services Agency
Lieutenant Governor Robert D. Orr, Director
T. "Ted" Pantazis, Executive Director
Third Floor Harrison Building
143 West Market Street
Indianapolis, Indiana 46204

The preparation of this report was financed in part through a comprehensive planning grant from the National Oceanic and Atmospheric Administration of the United State Department of Commerce.

A C K N O W L E D G E M E N T S

This report was prepared during the summer of 1976 with the help and assistance of Stephen D. Ring and Thomas R. Wilhelmy, second year students at the University of Chicago Law School. They were dedicated, disciplined and enthusiastic in their research, and I appreciate their efforts.

T. Ted Pantazis, Executive Director of the State Planning Services Agency, offered constant encouragement to our phase of the program. T. Russell Miller and Sue Miller, Principal Planners of the Indiana Coastal Zone Management Program, were understanding of our problems, constructively critical of our material, and always available to us for consultation in the assembly of this work product. Representatives of the Indiana Department of Natural Resources and State Board of Health gave us insight into their present problems and concerns.

I am indebted to my secretary, Mrs. Elizabeth M. Jackman, for the time and energy she unhesitantly devoted to the production of this material.

Lastly, I give special thanks to my wife Rosalind, and my daughters, Leslie and Susan, for their thoughtful understanding of my use of their time to complete this project.

Eugene M. Feingold

October 1, 1976

THE INDIANA COASTAL ZONE
MANAGEMENT PROGRAM

A Legal Inventory of
Applicable Indiana and Federal Law

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INTRODUCTION

The State of Indiana shoreline runs along the southern end of Lake Michigan from the Illinois border on the west to the Michigan border on the east. Approximately forty-three miles in length, it forms the northern boundary of Lake, Porter, and a part of LaPorte counties. The shoreline moves along the industrial cities of Hammond, East Chicago and Gary eastward to Burns Harbor, and then on, past the Indiana Dunes National Lakeshore and Indiana Dunes State Park to Michigan City. On a clear day, with only the naked eye, the entire shoreline and these contrasting uses can be seen in bold relief.

Unlike some of our neighboring Great Lakes states, there are no vast stretches of Indiana shoreline which are undetermined as to future use. To a greater extent, the Indiana Lake Michigan shoreline is fully committed and utilized.

Federal, state, and local bodies exercise jurisdiction, both separately and co-extensively, over the land, air and water resources of the Indiana Coastal Zone. Our effort is to identify this jurisdiction, to state and expand upon applicable legislation, both federal and state, and to discuss applicable common law, case law and interpretations of significant legislation. Not unlike the law as a whole, the area of law related to the coastal zone is a "seamless web", embracing the exercise

and interplay of state power, of federal power, of the rights of the individual, the State and the United States as property owners, and of the rights of Indiana citizens, as a collective group. This Report will illustrate in several areas the dynamism of this legal interplay of power, authority and action.

Lastly, in Indiana, there has been little judicial enlightenment in certain significant areas of the law relating to the Coastal Zone. This is due either from a lack of subject litigation or from a failure of our courts to reach or consider subject issues. In particular, the complicated problem of the "public trust" doctrine is relatively devoid of judicial discussion and analysis in Indiana decisions.

SUMMARY OF REPORT

The Coastal Zone Management Act of 1972 declared that it is the National Policy to preserve, protect, develop, and where possible, to restore or enhance, the resources of the nation's coastal zone for this and succeeding generations. The coastal zone is to extend inland from the shorelines only to the extent necessary to control shorelands, the uses of which have a direct and significant impact on the coastal waters, which include the Great Lakes area. The State of Indiana, acting through its State Planning Services Agency, is developing a management program for the land and water resources of its coastal zone. For study purposes, the Indiana program has set the preliminary boundaries of the coastal zone inland to about the middle of Lake, Porter and LaPorte Counties which border Lake Michigan and are within its water shed.

PRIVATE PROPERTY RIGHTS:

Riparian rights is a common law doctrine describing those rights to which the owner of a tract of land is entitled as a consequence of bordering upon a body of water. Strictly defined, riparian rights pertain to a river or stream and littoral rights pertain to a lake, although the former is generally used to encompass both.

Riparian rights deal with two general areas - rights in the flowing water, and rights in the bed of the watercourse or the submerged land.

The right of the riparian in the water as it flows by his land is one of use and enjoyment. Prior right gives no paramount right, and each riparian has an equal right to the flow of the water through his land. An exception to this general rule and unique to Indiana law is the principle that the owner of land upon which there is located a non-navigable stream or lake owns and has the right to control the surface of these waters.

In Indiana, the riparian has a right to the reasonable use of the water as it flows by. This use may be for domestic purposes, and if available in sufficient quantity, for non-domestic purposes.

Pollution by a riparian was held to be a nuisance, and early authority which allowed municipalities to non-negligently pollute a body of water was reversed early in this century by a more enlightened judiciary. Federal and state water pollution control acts now govern such matters.

Indiana has also considered the riparian's rights to dam or divert water (yes, under limitations), to obstruct the watercourse (no), to use the water as power (yes, with limitations), and to fish (yes).

The riparian rights in beds of water or submerged lands requires that a distinction be made between rivers and streams,

lakes and Lake Michigan, and that a futher distinction be made between non-navigable and navigable waters.

In non-navigable rivers and streams, the riparian is the owner of the bed as far as the thread, or mid-point of the stream. With respect to a non-navigable inland lake, which was originally surveyed and defined by meander lines which run on dry land and approximate the boundary of the body of water, the riparian owner was held to own the land beneath the lake far enough beyond the meandered line at water's edge to make out a full subdivision. The riparian owner's property interest in the bed is determined by a straight line projection of the congressional surveyor's lines, and not by a pie-shaped projection to the common law mid-point or thread of the lake. Although criticized and recognized to be contrary to common law and the law of most states, this law persists in Indiana. Once the ownership of the bed of the non-navigable lake is defined, Indiana courts hold that the owner owns from the bed upward through the surface of the water as well as the bed itself.

With respect to riparians, federal legislation authorizes the Secretary of the Army to establish harbor lines to protect harbors, and riparians may extend certain facilities from their shore boundary outward to the harbor line. The Secretary of the Army has a duty to see that improvements placed in navigable waters do not cause damage to the property of the riparian.

State law had given riparian owners of Lake Michigan

certain rights to fill in upon the submerged lands abutting their property and acquiring title thereto. This law has now been severly limited. The riparian's right to the use of flowing water for domestic purposes, and to impound water by dam or stream are now codified, as are the rights of riparians (and non-riparians) to divert flood waters for useful purposes.

INTER-RELATION OF PRIVATE AND PUBLIC PROPERTY RIGHTS:

The rights of the riparian owner in navigable waters is a complex legal relationship involving the rights of the federal government, state government and the general public in these same waters. One must first legally define navigable waters, and in doing so there is often a problem of the choice of law, state or federal, to be applied. The federal government has power over navigation under the Commerce Clause of the United States Constitution. Its regulation over commerce on the waters is as broad as the needs of commerce generally. The State of Indiana, like its sister states, has certain concurrent jurisdiction over navigable waters, is the owner of the beds of navigable waters, and has jurisdiction over most non-navigable waters and their intra-state commerce.

Generally, the riparian does not own the bed of the navigable stream or lake, and in most cases his right must be subordinate to the paramount public right of navigation and the public rights incident thereto. The riparian has

certain property rights in the banks and beaches of the watercourse and there is no public easement of access to the navigable waters over the lands of the riparian unless such an easement has been acquired by grant or perscription. The riparian, like the general public, has a right of useage in the navigable waters.

ACCRETIONS:

Under the doctrine of riparian rights, a riparian owner is entitled to any land added to his water frontage by accretion or reliction. Accretion is the process of gradual and imperceptible increase of land caused by the contiguous waters depositing earth, sand and sediment. Reliction is the increase of land caused by the recession of the waters of the river or lake. In Indiana, title to the land formed by accretion or reliction is generally vested in the riparian owner. Avulsion, the opposite of accretion, is the sudden and rapid change of the course of a river by which the river abandons its old channel and seeks a new one. An avulsion has no effect upon title to land.

Great Lakes frontage, like ocean frontage, is a valuable property asset. The Supreme Court of the United States has been called upon many times to decide whether the riparian owner, by a process of accretion, or the state, by statute or claim of right, is the owner of additions to such valuable land. The Supreme Court has had to make a choice of law,

either federal common law, or state property law, to make these decisions. Where the ownership of lands which are also the boundaries of the United States are involved, the Supreme Court has chosen to apply federal common law to decide between the competing claims of the private property owner and the state. Federal common law follows the doctrine of accretion, and in most decisions, the riparian was found to own the accreted property. For the state to acquire it, a taking is required for which just compensation must be paid.

Given the general law that the state owns the bed of the navigable waters, and the riparian owns the added land, either through accretion or reliction, new legal issues have been presented by reason of artificial or man made influences, such as reclamation projects and sand nourishment upon shore lines. In a 1973 decision of the Supreme Court of the United States entitled Bonelli Cattle Company vs. Arizona, these issues reached center stage. The court first found that federal law recognizes the doctrines of accretion and avulsion, and concluded that the rechannelization of the Colorado River sounded in avulsion but reasoned in accretion. The court concluded that the riparian rather than the state should gain the land resurfaced in the course of this governmental activity where such resurfaced land is not necessary to a navigational project or to any navigational purpose. Further complicating this area is a companion

doctrine of re-emergence which has been accepted by several of the Great Lakes states but upon which there is no decision in Indiana.

NAVIGATION SERVITUDE:

The corollary of the navigational power is the navigation servitude. It has sometimes been defined as a shorthand expression for the rule that in the exercise of the navigation power, certain private property may be taken without compensation. It has generally been held that the navigation servitude has its limits at the ordinary high water mark of a navigable water, lake or ocean. The lands below the high water mark are always subject to the dominant or navigation servitude in the interests of navigation, and its exercise calls for no compensation.

PUBLIC TRUST DOCTRINE:

One of the most challenging legal questions in Indiana concerns the matter of the Public Trust Doctrine. Does it or does it not exist with respect to navigable waters in the State of Indiana, and if it does exist, what obligations are imposed upon the state in carrying out the trusteeship for the public?

It appears that there is no decision by an appellate or reviewing court in the State of Indiana which directly addresses this issue. It may be that there has been a lack of subject litigation or a failure of the Indiana courts to

reach or consider this subject or issues where it was appropriate. In our sister states of Wisconsin, Illinois and Michigan, the matter of the Public Trust Doctrine as to navigable waters has been thoroughly discussed, refined and renewed in numerous decisions beginning with the Illinois Central Railroad vs. Illinois case, which was ultimately decided by the Supreme Court of the United States in 1892.

To what uses may these submerged lands of the state be put? May the submerged lands be sold or otherwise given to private use? From 1907 to 1973, under the Indiana Lake Michigan Fill Statute, a riparian appeared to have the right to fill out and into the Lake and receive a patent or title thereto. Such permits were issued to steel manufacturing companies who filled in hundreds of acres from the Illinois state line to the eastern limits of the City of Gary. Following an amendment to this statute in 1973, the Indiana Department of Natural Resources has placed a moratorium upon any further fill applications.

Notwithstanding the lack of judicial statement or response, we believe that the Public Trust Doctrine in navigable waters is a legal doctrine applicable to the State of Indiana in a manner not unlike that of her sister states.

SPECIFIC AREAS OF PUBLIC CONCERN:

There are specific areas of public concern in a coastal zone such as flood control and prevention, erosion control,

harbor and related construction, dredging, filling and extraction, and a concern to regulate water levels particularly in the Great Lakes.

Numerous federal and state laws have been adopted through the years to authorize government to control and to restore lands affected by waters. These statutes are discussed in greater detail in the text concerning these specific areas.

LOCAL AND REGIONAL GOVERNMENTAL AND REGULATORY JURISDICTIONS WITHIN THE COASTAL ZONE:

The shoreline of Indiana, only 43 or so miles in length, is occupied for a fair part by several major cities with industrial and manufacturing developments, and for a fair part by residential towns and federal and state park lands.

The local units of government, cities, towns, counties and to a lessor degree townships, have powers which will affect land use and other decisions in a coastal zone. In addition to specific powers granted to cities and towns concerning annexation, sewers, sewage and waste disposal, and specific broad powers of regulation including the police powers, the General Assembly has recently conferred "home rule" on cities and counties within the State of Indiana. These "residual" or "reserved" powers have been granted through legislation and not constitutional amendment. There are specific limitations set forth in the statute, and the Indiana and federal counts have interpreted these home rule statutes in several decisions during the past two years.

The cities, towns and counties also have the power to control use of land through its zoning and subdivision control ordinances. The principal enabling legislation was recodified in 1947 and remains as the basic authority for planning, zoning and enforcement. Although not applicable to Lake County, Indiana, the General Assembly has adopted enabling legislation for area planning on a county wide basis. The Secretary of the Interior has certain powers granted to him concerning the zoning of land within the boundaries of the Indiana Dunes National Lakeshore, and his enforcement power is related to a granted power to condemn land within the boundaries where local zoning ordinances do not contain guidelines which are set by him.

Regional planning commissions are authorized by state law. Within the three county area comprising the preliminary coastal zone, the Northwestern Indiana Regional Planning Commission (NIRPC) has been established by the legislative bodies of Lake and Porter Counties, and the Michianna Area Council of Governments (MACOG) has been established by the legislative bodies of LaPorte and neighboring counties. These regional planning commissions initiate and maintain comprehensive policy planning and programming processes for the entire region and coordinate their activities with all local units of government. Each acts as the designated review agency for the federal government on local projects, and the clearing house for A-95 Clearing House Review.

The State Planning Services Agency was created within the executive office of the Governor to perform certain functions of state planning services, both on a community as well as state level. The Coastal Zone Management Program is being administered by this agency on behalf of the State of Indiana. Major planning is mandated by the Federal Water Pollution Control Act amendments of 1972. The Water Quality Management Plan, sometimes referred to as the "208" Plan, requires that certain direct regulatory programs including land use control be incorporated into the Water Quality Management Plan and such land use controls are likely to shape the development and use patterns of major areas within the preliminary coastal zone for years to come.

GOVERNMENTAL, REGULATORY AND AGENCY JURISDICTIONS AND LEGISLATION:

Federal and state legislation relating to governmental, regulatory and agency jurisdiction within the coastal zone is a mass of material, in part separate and in part related, serving different interests and objectives. Several states are considering the establishment of a "one-stop" permit center where a person desiring to comply with existing law and regulation can be advised of all of his requirements and can make all of his applications.

We believe it is more comprehensible to view these matters as programs involving agencies rather than agencies exercising powers.

The broad categories of programs relating to the

coastal zone include energy, pollution and waste, recreation and conservation, shipping and boating, and regional planning acts.

SPECIFIC ISSUES AFFECTING THE INDIANA COASTAL ZONE:

Along the limited Indiana shoreline lies the Indiana Dunes State Park and the Indiana Dunes National Lakeshore, a federal park. While the fund to acquire the State park was established by the General Assembly in 1923, the National Lakeshore funding began in 1966. Each park seeks to preserve the uniqueness of the Indiana Dunes in its present natural state.

At either end of these park areas there exists major generating stations of Northern Indiana Public Service Company. The Michigan City generating station at the east and the Bailley generating station at the west of these parks have fossile fueled generating plants. A nuclear powered generating plant has been proposed for construction at the Bailley site, and after approximately six years of hearings before regulatory bodies and of review before federal appeal courts, the construction permit authorized by the Atomic Energy Committee (now Nuclear Regulatory Commission) has been confirmed. Two other major generating stations operate within the coastal zone at Hammond and at Gary. The industrial demands for power and energy in Northwestern Indiana is increasing, and projected peak load requirements through the 1970s may

double. The utilities, it is assumed, will continue to seek an increase of internal capacity. The future siting of power plants within the coastal zone remains a possibility.

EMINENT DOMAIN:

The federal condemnation power is set forth in a general eminent domain statute, 40 U.S.C. §257, which authorizes any officer of the government to use the judicial process for condemnation whenever in his opinion it is necessary or advantageous to the government to do so. Where such officer seeks to acquire the land or interest in land for public use before a final judicial determination, he may file a "declaration of taking". This declaration, together with a deposit of the estimated amount of just compensation will cause the title to the land or the interest therein to vest in the United States leaving only the judicial determination of just compensation to be made.

In 1971, in connection with another act, the Congress adopted a uniform real property acquisition policy. Although it created no additional rights or liabilities to the parties, it was intended to cause the officer of the government to act fairly, promptly and with full disclosure in dealing with the owner of the property being condemned.

In several instances, the Congress has described specific condemnation procedures for certain departments of the federal government. These procedures may be supplemental

to the general eminent domain act, or an elective alternative to that act.

Within the boundaries of the Indiana Dunes National Lakeshore, under certain limitations and conditions, the authority of the Secretary of the Interior to acquire property by condemnation is suspended.

The State of Indiana, and its local and district units of government having the power of condemnation, may use the provisions of the general eminent domain act set forth in I.C. 32-11-1-1, et seq.

Whenever the Governor of the State deems it necessary to acquire any real estate on which to construct any public buildings for the State of Indiana or to acquire any real estate adjoining any of the lands of the state in which buildings have been erected, he may order the Attorney General to commence a condemnation action.

Some units of the state exercise their right of eminent domain under specific powers and procedures granted to it by the General Assembly including airport authorities, parks and districts, the Indiana Port Commission and the State Highway Commission.

For some purposes, there exists an administrative condemnation proceeding which can be initiated by boards of public works of cities for the acquisition of real or personal property for the use and benefit of the city or for public streets and alleys.

Public utilities and corporations organized under the State of Indiana and authorized to furnish, transmit or distribute electrical energy, gas, oil or the like, have the power to take, condemn and appropriate land or any interest therein for the purposes and objects for which it was created. The procedure to be followed by such public utilities or quasi-public corporations is that set out in the general eminent domain statute of Indiana.

ARTICLE III

COASTAL ZONE MANAGEMENT ACT OF 1972 - DECLARATION AND DEFINITIONS

The Coastal Zone Mangement Act of 1972[1] declared that it is the national policy to preserve, protect, develop, and where possible, to restore or enhance, the resources of the nation's coastal zone for this and suceeding generations.[2]

The Act also declared that it is national policy "to encouage and assist the States to exercise effectively their responsibility in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources of the coastal zone giving full consideration to ecological, cultural, historical and esthetic values as well as to needs for economic development."[3]

The Coastal Zone, as defined by the Act, "means the coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder) . . ."[4] The Zone extends inland from the shorelines, only to the extent necessary to control shorelands, the uses of which have a direct and significant impact on the coastal waters.[4]

The Coastal waters, as defined by the Act, "means . . . in the Great Lakes area, the waters within the territorial jurisdiction of the United States consisting of the Great Lakes, their connecting waters, harbors, roadsteads, and

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1. 16 U.S.C. 1451-1464.
2. 16 U.S.C. 1452(a).
3. 16 U.S.C. 1452(b).
4. 16 U.S.C. 1453(a).

estuary-type areas such as bays, shallows, and marshes . . ."[5]

The State of Indiana, acting through its State Planning Services Agency, is developing a management program for the land and water resources of its coastal zone. In order to identify the means by which the State proposes to exert control over the land and water uses, a requirement of the program[6] - the listing or inventory of existing relevant constitutional provisions, legislative enactments, regulations and judicial decisions affecting the Indiana Coastal Zone - is necessary.

This legal report is made to inventory present law, to assist in the determination of the adequacy of present law, and to stimulate thought as to viable options in this area.

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5. 16 U.S.C. 1453(b).
6. 16 U.S.C. 1454(b)(4).

ARTICLE IV

PRIVATE PROPERTY RIGHTS

A. RIPARIAN RIGHTS - DEFINITION:

The word riparian is derived from the Latin word riparius meaning "pertaining to or situated on the bank of a river." Riparian rights is a common law doctrine describing those rights to which the owner of a tract of land is entitled as a consequence of bordering upon a body of water. Riparian rights, strictly defined, pertain to a river or a stream; littoral rights are similar rights of the landowner adjoining a lake. However, the phrase "riparian rights" is generally used to encompass both riparian and littoral rights, and both areas will be discussed herein under the more general term "riparian rights."

Primary to all riparian rights is that the boundary of the tract of land be the water course. State v. Tuesberg Land Company, 61 Ind. App. 555, 109 N.E. 530 (1915). Riparian rights are incident to the ownership of land and can be lost only by grant or perscription. City of Logansport v. Uhl, 99 Ind. 531 (1883). They are natural rights appurtenant to the freehold in common and equal with all others holding land upon the watercourse. City of Valparaiso v. Hagen, 153 Ind. 337, 54 N.E. 1062 (1889). For riparian rights to attach,

the land must not only be contiguous to the water, but in contact with it. Illinois Central R.R. v. Illinois, 146 U.S. 387 (1892). An intervening street or highway or the retention of the rights by the grantor will prevent the freeholder from acquiring riparian rights. Irvin v. Crammond, 58 Ind. App. 540, 108 N.E. 539 (1915).

A discussion of riparian rights must deal with two general areas of rights - rights in the flowing water, and rights in the bed of the watercourse or the submerged land.

B. RIPARIAN RIGHTS - IN FLOWING WATER:

There is generally no property in the corpus of the water. The right of riparians is one of use and enjoyment, or a usufruct, in the water as is flows by the land. Dilling v. Murray, 6 Ind. 324 (1855); Bass v. City of Fort Wayne, 121 Ind. 389, 23 N.E. 259 (1890). Under the doctrine of riparian rights, prior use gives no paramount right to the use of the water. Each riparian has an equal right to the flow of the water through his land. Dilling v. Murray, supra.

An exception to this general rule and unique to Indiana law is the principle that the owner of land upon which there is located a non-navigable stream or lake owns and has the right to control the surface of these waters. Sanders v. DeRose, 207 Ind. 90, 191 N.E. 331 (1934); Patten Park v. Pallack, 115 Ind. App. 32, 55 N.E.2d 328 (1944).

This exception is in part attributable to a rationale following from the ownership of the submerged land as well as the ownership of the riparian banks.

1. Natural Flow vs. Reasonable Use Theories:

The language of some Indiana cases would suggest that the right of a riparian is to have the watercourse flow as it naturally would. In Cory v. Silcox, 6 Ind. 39 (1854), the court held that a riparian cannot divert or diminish the quantity of water which would otherwise descend to lower riparians. As recently as 1962, the Indiana Appellate Court again used this language holding that a lower riparian has a right of flowage in natural ways and quantities. Smith v. Atkinson, 133 Ind. App. 430, 180 N.E.2d 542 (1962).

Indiana, however, has adopted the reasonable use theory of riparian rights. An absolute right theory would preclude all beneficial uses of water, which would be both unreasonable and impractical. Therefore, both statutory and case law provide for "reasonable use" under which riparians may use the water as it flows by so long as such use is reasonable.

2. Use for Domestic Purposes:

Indiana Code (I.C.) 13-2-1-3 provides that riparians at all times have a right to use the water for domestic purposes. Domestic purposes are non-exclusively defined to be household purposes and the watering of poultry, livestock and domestic animals. Domestic uses have priority and are superior to all other uses. Therefore, no upper riparian

can use the water for any extraordinary or secondary purpose if there would be a lack of supply to lower riparians for domestic purposes. Valparaiso City Water Co. v. Dickover, 17 Ind. App. 233, 436 N.E. 591 (1891). A question undecided in Indiana is if there is an insufficient supply of water for the domestic needs of all riparians, must all riparians shall equally in the deficit, or may upper riparians satisfy their domestic needs to the deprivation of lower riparians? I.C. 13-2-1-3 states that each owner of land shall have the right to use the watercourse in the quantity necessary to satisfy domestic purpose needs. The Indiana Supreme Court has held that no upper riparian has the right to use the water to the material injury of lower riparians. State v. Pottmeyer, 33 Ind. 402 (1870). It would appear that the use by the upper riparians for domestic consumption is not a material injury as contemplated by common law or the statute.

3. Use for Non-domestic Purposes:

Each riparian is also entitled to use the water for reasonable non-domestic uses. Reasonableness is not measured by the requirements of a given business, but by whether the use is proportionate and reasonable with reference to the quantity of water usually in the stream or lake. Valparaiso City Water Co. v. Dickover, supra. Reasonableness is a question to be answered by the trier of fact. Muncie Pulp Co. v. Koontz, 33 Ind. App. 532, 70 N.E. 999 (1904); Barnard v. Shirley, 135 Ind. 540, 34 N.E. 600 (1893). A lawful use, if

exercised to a point of reasonableness, may constitute a nuisance.

The relationship between upper and lower riparians was clarified in the Barnard decision.

> "The right of one proprietor to have the stream ascend to him pure must yield in a reasonable degree to the right of the upper proprietors whose occupation of their own lands, and whose use of the water for mill, manufacturing, domestic or other purposes will tend to make the water more or less impure." Barnard v. Shirley, 135 Ind. 547, 549; 34 N.E. 600, 603 (1893).

The Barnard decision also proposed a balancing of the equities to determine how far the lower riparian rights must yield before any injunction will be granted.

> "Inconveniences resulting from such causes must be endured by individuals for the general good; otherwise we should have to forego a multitude of the blessings of modern civilization." Barnard v. Shirley, 135 Ind. 547, 549, 34 N.E. 600, 602 (1893).

4. Pollution by Riparians:

The pollution issue is now subject to strict federal and state statutory regulation. The earlier common law development of the reasonable use theory of riparian rights in water included a changing theory regarding the pollution effects which accompanied use of the water for manufacturing purposes. The Barnard v. Shirley, decision, supra, in 1893 held that sewage and waste may be cast in the streams if material injury was not caused thereby. In balancing the equities to determine whether to grant in injunction, the

court considered such criteria as the ability, physically, to move the polluting activity so as to avoid injury to lower riparians, negligence in conducting the activity, and the ability to prevent the injury. A series of decisions in the early 1900s held that a riparian had no right to pollute a stream regardless of the skill he exercised or the lack of negligence, and that damages were properly recoverable if the pollution substantially impaired the value of the land and rendered it unfit for domestic purposes. Weston Paper Co. v. Pope, 155 Ind. 394, 57 N.E. 446 (1900); Muncie Pulp Co. v. Koontz, supra; West Muncie Strawboard Co. v. Slack, 164 Ind. 321, 72 N.E. 879 (1904); American Plate Glass Co. v. Nicoson, 34 Ind. App. 643, 73 N.E. 625 (1905). Pollution was recognized as a nuisance, and the fact that the water course was polluted by others did not absolve one defendant of liability. Muncie Pulp Co. v. Koontz, supra. An activity constitutes a nuisance if, in the judgment of reasonable men, whether lawful or unlawful, the activity is naturally productive of actual, physical discomfort to persons of ordinary sensibilities and of ordinary tastes and habits. Cox v. Schlacter, 147 Ind. App. 530, 262 N.E.2d 550 (1970).

5. Pollution by Municipality, an Early Exception no Longer Granted:

Earlier, in 1891, the court carved an exception to the pollution rule in favor of municipalities. City of Valparaiso v. Hagen, 153 Ind. 337, 54 N.E. 1062 (1889). The Indiana Supreme Court reasoned that:

(a) The City had no other means of discharging

the sewage of the inhabitants;

(b) The City was non-negligent in constructing a disposal system; and

(c) The City's methods conformed to the statute authorizing construction of the disposal system.

As late as 1912, the so-called necessity rule for municipalities continued as an exception to the right of lower riparians to enjoin pollution of the watercourse by upper riparians. Penn-American Plate Glass Co. v. Schwinn, 177 Ind. 645, 98 N.E. 715 (1912). While recognizing the existence of this exception, the Schwinn decision, supra, questioned the merits of such a rule given a more thorough analysis of the public health argument upon which it was based. The dilemma was largely solved through technological advancements.

In City of Frankfurt v. Slipher, 88 Ind. App. 356, 162 N.E. 241 (1928), the Appellate Court ruled that since the sewage could now be purified and rendered harmless at reasonable cost, the necessity rule would no longer be followed. The necessity rule was also eliminated by statute as stated in Elson v. City of Indianapolis, 246 Ind. 337, 204 N.E.2d 857 (1965).

> "However, the enactment of Clause Four (Section 3-1706 (1946 Repl.)) appears to express a clear legislative intention that thereafter compensation should be paid to any persons whose property was damaged as the result of some public construction without regard to whether any of his land was taken or not and even though the construction was completed

as proposed - that is, without regard to any negligence in such construction." Elson v. City of Indianapolis, 246 Ind. 337, 350, 204 N.E.2d 857, 864 (1965) (concurring opinion).

6. Damming and Diverting Waters:

Among the other uses which have been specifically provided riparians both by statutory and case law are damming or diverting waters for mechanical or agricultural purposes. See: City of Valparaiso v. Hagen, supra. The water, however, must be returned to the water shed. The courts have consistently held that city water works do not have a right, as riparians, to divert water from the stream in order to make merchandise of it and distribute it to its residents. Valparaiso City Water v. Dickover, supra; City of Elkhart v. Christiana Hydraulics Co., 223 Ind. 242, 59 N.E.2d 353 (1945). To divert waters for a city water supply, a city must use its power of eminent domain.

Once the riparian artificially collects water into a reservoir (for irrigation, water works or the like) he is liable to others if the water escapes causing damage either by flooding or from its pollutant content. The rule is that ". . . (any) person who brings on his lands anything likely to do mischief if it escapes must keep it at his peril. . . (else he) is liable if it escapes and does injury, whether it be beasts, water, filth or stenches." Central Indiana Coal Co. v. Goodman, 111 Ind. App. 480, 39 N.E.2d 484 (1942); see also, Niagara Oil Co. v. Ogle, 177 Ind. 292, 98 N.E. 60 (1912).

7. Obstructions:

A riparian may not obstruct a natural water course. Gwenn v. Meyers, 234 Ind. 460, 129 N.E.2d 225 (1955). He may, however, exclude diffuse waters within his land. Vandalia R.R. Co. v. Yeager, 60 Ind. App. 118, 110 N.E. 230 (1915). To constitute a natural watercourse as opposed to diffuse surface waters, the water must flow in a definite direction with banks and a channel which is permanent for all practical purposes. It is not necessary that the water shall flow continually, as long as it flows for a substantial period of the year. Gwenn v. Meyers, supra; Weis v. City of Madison, 75 Ind. 241 (1881); Lowe v. Lodge Realty, 133 Ind. App. 434, 214 N.E.2d 400 (1966).

In Indiana, surface or diffuse water is treated as a common enemy and riparians may erect such barriers as may be deemed necessary to keep surface water from their lands. Weis v. City of Madison, supra; Reed v. Chaney, 111 Ind. 387, 12 N.E. 717 (1887); Ramsey v. Ketchum, 73 Ind. App. 200, 127 N.E. 204 (1920). However, surface water may not be diverted from its natural course by collecting it in a channel and discharging it upon the lands of neighbor. Reed v. Chaney, supra; Watts v. Evansville Mt. C & N R.R. Co., 191 Ind. 27, 129 N.E. 315 (1921). Whereas earlier decisions allowed riparians to build embankments and levies to protect themselves from overflow waters of a natural watercourse, this rule was modified by the Watts decision. The Watts rule imposed a duty upon the riparian to use reasonable

care when constructing such embankments so as not to expose lower riparians to damage. The modification to the earlier rule did not alter the requirement that a construction must not impede the free flow of water leaving the upper riparian's property in the full width of the channel. Taylor v. Fickas, 64 Ind. 167 (1878).

8. Use of Water as Power:

Riparians do have the right to use the water for the power it contains. In non-navigable streams, the owner of land through which a stream ran had the right at common law, derived from his riparian ownership, to dam the water to use it in a mill or for any lawful purpose, provided only that the water was returned to the stream after use. Lowe v. Indiana Hydro-Electric Power Co., 197 Ind. 430, 151 N.E. 220 (1926). However, this did not include the right to swell the waters back upon the lands of upper riparians; such invasion gave rise to an action for damages. Guynn v. Wabash Water and Light Co., 181 Ind. 486, 104 N.E. 849 (1914); Trustees of The Wabash & Erie Canal v. Speers, 16 Ind. 441 (1861). The right to back waters upon the lands of an upper riparian must be obtained from him by grant or perscription. Seymour Water Co. vs. Lebline, 195 Ind. 487, 144 N.E. 30 (1924).

9. Fishing:

Among the other rights of riparians are the right to the fish in non-navigable water for which damages may be recovered if this right is injured by pollution. West Muncie

Strawboard Co. v. Slack, supra. The right to the fish in navigable waters is shared with the general public. A riparian has the right to the ice frozen in the stream as a reasonable use of water so long as his action does not injure lower riparians. State v. Pottmeyer, supra; Brookville and Metamora Hydraulic Co. v. Butler, 91 Ind. 134 (1883).

C. RIPARIAN RIGHTS IN BEDS OF WATERS:

1. General:

The second major division of riparian rights is the right in the bed of the watercourse abutting the riparian's tract of land. Within this division a distinction must be made between rivers and streams, lakes and Lake Michigan, and a further distinction between non-navigable and navigable waters. There are significant differences among these various classifications.

2. Non-navigable Rivers and Streams:

In non-navigable rivers and streams, the riparian is the owner of the bed as far as the thread, or mid-point, of the stream. Ross v. Faust, 54 Ind. 471 (1876). The conveyance of riparian land bounded by a non-navigable river includes the bed to the thread of the stream unless a contrary intention is manifest. A conveyance can be made expressly reserving the bed of the stream to the grantor.

3. Meandered Lands and Bed Ownership Problems:

There remains confusion concerning the ownership of

the beds of a non-navigable lake. An understanding of the law relating to this matter requires an understanding of meandered lands and meander lines. When originally surveyed by authority of the United States, public land bordering on waters, marshes or swamps was defined by a meanderline run on dry land approximating the course of the stream or lake. The land lying between this meanderline and the watercourse itself was known as meandered land.

The Indiana Supreme Court, in Sphung v. Moore, 120 Ind. 352, 22 N.E. 319 (1889), decided that a patent or conveyance for a fractional quarter section, of which one boundary is a meandered stream, passes title to all lands conveyed including the land within the lines of said quarter section between the meanderline and the water's edge. The Court concluded that meanderlines are not boundary lines unless such is the intention of the parties, but are lines run for the purpose of ascertaining the approximate quantity of land for sale.

In Stoner v. Rice, 121 Ind. 51, 22 N.E. 968 (1889), decided in the same year as the Sphung decision, supra, the Court addressed itself to similar problems affecting a non-navigable inland lake. In holding that the original successor in interest to the patentee of the fractional section described to the meanderline was a riparian owner whose title included lake bed ownership, the court said:

> ". . . the owners of land bordering on non-navigable inland lakes . . . when the subdivisions of the land are surveyed by running

> a meanderline between the dry land and the water to ascertain the number of acres of dry land, and designating such subdivision as a fractional quarter or a lot, giving the number of acres of dry land, takes the title to all the land contained within the subdivision; that is to say, it takes as a riparian owner and the title includes and he owns the land beneath the lake for enough beyond the meandered line and water's edge to make out the full subdivision in which the land is so situated." Stoner v. Rice, 121 Ind. at page 52, 22 N.E. at page 968 (1889).

This decision treated the submerged land as surveyed, and then extended the survey upward over the water so as to fill out the subdivision. This legal conclusion has been sharply criticized in both federal and state decisions which followed.

In Harden v. Gorden, 140 U.S. 371 (1891), the Supreme Court pointed out that the Stoner decision was in conflict with the common law of England as recognized and adopted in other states of the United States. The common law viewed the interest of the owner near an inland lake, whose description referred to meanderlines, as a riparian owner whose interest in the bed of the lake was determined by usual rules regarding riparian owners along lakes and streams. Tolleston Club of Chicago v. Carson, 108 Ind. 642, 123 N.E. 169 (1919), also criticized the rule of Stoner. Nevertheless, the Indiana Court was loath to reverse the established rule of Stoner and later decisions extending it because of the possible adverse effect on title to real estate.

> "No doubt many titles have passed on the faith of the rule, and the doctrine of stare decisis

> requires us to adhere to it now, whether right or wrong. To change the rule now would unsettle titles, and would result in greater harm than good." Tolleston Club of Chicago v. Carson, 188 Ind. at 655, 123 N.E. at 169 (1919).

The later decisions of Sanders v. DeRose, 207 Ind. 90, 191 N.E. 331 (1934) and Earhardt v. Rosenwinkle, 108 Ind. App. 281, 25 N.E.2d 265 (1940), further demonstrate the lack of a consistent legal approach to the problem of inland lake bed ownership. In Sanders, supra, one party owned almost all of the lakeshore boundary, and another party owned a very small portion of the lakeshore boundary. In confirming the right of the larger boundary owner to exclude the smaller boundary owner from fishing and boating on the greater surface of the water, the Indiana Supreme Court said:

> ". . . each owner has the right to the free and unmolested use and control of his portion of the lakebed, and water thereon for boating and fishing." Sanders v. DeRose, 207 Ind. at 95, 191 N.E. at 333 (1934).

The Court appeared to recite the Stoner rule as to the manner of determining ownership of the lakebed, but then incorrectly referred to it as the common law.

In the Earhardt decision, supra, concerning an issue regarding the boundary of adjacent lots along Tippecanoe Lake, the Appellate Court stated as the law of Indiana, the following:

> ". . . a grant of land adjacent to a non-navigable lake or river carries title to the thread thereof . . . " Earhardt v. Rosenwinkle, 108 Ind. App. at 291, 25 N.E.2d at 272 (1940). (our emphasis)

The Court miscites the Stoner decision as authority for the proposition of law, which, as earlier discussed in Tolleston Club of Chicago v. Carson, supra, denies the "thread of the lake" concept, and supports a "filling out of the lines of the subdivision" concept for determination of lakebed ownership.

Indiana law, as it relates to inland non-navigable lakes, holds that the owner of a tract of land described to a meanderline generally owns through the meanderland to the lake; and once at the lake, the owner's property interest in the bed is determined by a straight line projection of the congressional surveyor's lines, and not by a pie-shaped projection to the common law mid-point or thread of the lake.

D. FEDERAL LEGISLATION RE: RIPARIANS:

SUMMARY OF LEGISLATION REGARDING
RIPARIAN RIGHTS

Harbor Lines: Establishment
33 U.S.C. 404
30 Stat. 1151, C. 425, Sec. 11, March 3, 1899

Federal Power:

The Secretary of the Army is authorized to establish harbor lines to protect harbors. No pier, wharf, bulkhead or other work may be built outside established harbor lines, except in compliance with the regulations set forth by him, which regulations appear in 33 C.F.R. 209.150. See: 33 U.S.C. 403.

Requirements for Construction Beyond the Established Harbor Lines:

When permission is granted for work beyond the established

harbor lines, the Secretary of the Army must:

1. Have ascertained the amount of water displaced by the structure;

2. If he deems it necessary, he may require the parties to whom permission is granted to make compensation for the displacement either by:

   (i) excavating in some part of the harbor, including tidewater channels between the high and low water mark, to create a basin for as much tidal water as may have been displaced; or

   (ii) any other mode that may be satisfactory to him.

State's Role:

The harbor lines created pursuant to this section mark the extent of the state's jurisdiction and authority to grant permission to build or fill along the shore of Lake Michigan. See: I.C. 4-18-13.

Harbor Lines: Regulations
33 C.F.R. 209.150

Background:

Under previous policy, riparian owners could fill or construct open pile structures shoreward of the established harbor line without obtaining a permit under 33 U.S.C. 403. This presented a danger for appropriate consideration was not given to environmental impact or to the public interest.

Procedure:

All existing and future harbor lines are guidelines for defining the offshore limits of open pile structures or fills. A permit under 33 U.S.C. 403 is acquired for any work commenced shoreward of the future or existing harbor line as of the date of publication of this regulation in the Federal Register (F.R. 8280, May 27, 1970). This regulation does not alter the earlier requirements for work commenced prior to May 27, 1970. A procedure is provided for the establishment of new harbor lines or a modification of old harbor lines. Public hearings and notice to interested persons are required to consider the public interest.

Deflection of Current; Liability to Riparian Owners
33 U.S.C. 500; 25 Stat. 423, C. 860,
Sec. 2, August 11, 1888

Riparian Right:

The Secretary of the Army has a duty to investigate when he receives a complaint that a bridge, pier or abutment placed in a navigable water has deflected the current and caused erosion of the banks or other serious damage or danger to property. If the complaint is well founded, the Secretary of the Army shall order such damage repaired or danger prevented by such means and in such time as the Secretary may specify. If the owners or operators of the bridge, pier or abutment default in the compliance, they shall be liable in any court of competent jurisdiction to the injured riparian in an amount double the amount of his injury.

THE SUBMERGED LANDS ACT
43 U.S.C. 1301 - 1305; 67 Stat. 29, C. 65,
Title I, Sec. 2, May 22, 1953.

The Rights of the States:

Title and ownership of lands beneath navigable waters within the boundaries of the State and the natural resources within such lands and boundaries are recognized and confirmed. The state's right to manage and administer these lands and natural resources is also recognized and confirmed in accordance with the applicable state law. 43 U.S.C. 1311.

Federal Power:

Nothing in this chapter affects the constitutional authority of the United States over these lands and waters for the purposes of navigation, flood control or the production of power, and nothing is construed as a release or relinquishment of the right of the United States arising under the Constitutional authority of Congress to regulate or improve navigation or related purposes. 43 U.S.C. 1311(d). See: 43 U.S.C. 1314 for an elaboration of the rights and powers retained by the United States.

There is excepted from section 1311:

1. All lands to which the U.S. holds title pursuant to state law;

2. All lands expressly ceded to the U.S. when the

states entered the union;

3. All lands acquired by the U.S. in a proprietary capacity;

4. Any rights in land held by the U.S. under claim of right;

5. All lands held by the U.S. for the benefit of any tribe, band or group of Indians or individual Indians;

6. All structures and improvements constructed by the U.S. in the exercise of the navigation power.

E. STATE LEGISLATION RE: RIPARIANS:

Lake Michigan Lands - Rights of Riparian Owners
I.C. 4-18-13-1, et seq., Acts 1907, Amended 1973, P.L. 24

Riparian owners of Lake Michigan have the qualified right to reclaim or build upon the submerged land, as far as the dock or harbor line, for industrial, manufacturing, trade, commerce and navigation purposes; and also for the use and maintenance of public recreation facilities. The riparian shall own the filled in land if compliance is made with I.C. 4-18-13-3 and $100.00 per acre is paid to the office of the Secretary of State.

NOTE: By reason of the amendment, the Natural Resources Commission of the Department of Natural Resources may, rather than shall, issue to the riparian owners the authority to fill in and improve such land, with approval of the governor of the state. No criteria are given for the exercise of this discretion.

Water for Domestic Purposes - Impounding for Irrigation - Riparian Owner's Rights
I.C. 13-2-1-3, Acts of 1955

1. Riparian owners shall at all times have the right to use water from a public watercourse for domestic purposes, including household purposes, drinking water for livestock,

poultry and domestic animals. Domestic purposes have priority and are superior to all other uses of the water.

2. Riparian owners have the right to impound water by dam on stream or in an off-stream reservoir when the flow of water is in excess of existing reasonable uses at the time of such impounding. The obstruction facility on stream must include an outlet to release non-excess water to which the owner is not entitled. Approval from the Natural Resources Commission is a prerequisite to any such action.

3. When additional stream flowages are created by persons, utilities, governments or associations releasing from impoundments built and financed by them, they may use such increased flowages, and the riparian shall have no rights in the increased flowage beyond normal stream flow.

Diversion of Flood Waters - Commission to Mediate Disputes - Reports to Commission
I.C. 13-2-1-6, Acts of 1955, as added by Acts of 1959

1. Upon approval by Natural Resources Commission, either a riparian or nonriparian may divert floodwaters for useful purposes, including storage, provided existing users are not injured, and other existing rights are not denied.

2. Any party to a dispute between users of surface water may request the Natural Resources Commission to mediate the dispute. The Commission's recommendation is not binding and does not preclude legal action.

3. The Natural Resources Commission has the right to require any user of ground or surface water to make specific reports as to the volume used.

Piers, Wharves, Docks
I.C. 13-2-4-5, Acts 1905

Riparian owners along navigable streams may build on his land, and upon submerged lands beneath the waters bordering his land, piers, wharves, docks or harbors in and of navigation and commerce, provided that such structures do not extend into the stream farther than necessary, and do not obstruct navigation and shipping.

Comments:

The riparian has no right to exclusive use of the

waters within his pier(s), for the right of the public to use the water for purposes of navigation and fishing remains.

NOTE: I.C. 13-2-4-4 provides a penalty for obstructing a navigable watercourse. The concept of obstruction shall be the same as general law governing public highways.

Mills Not Affected
I.C. 13-2-3-6, Acts 1905

The declaration of a watercourse as navigable shall not affect any mill, dam, viaduct, bridge or the like on such stream, except where such structure has been abandoned for more than 12 months.

Gates at River Banks
I.C.13-2-4-8, Acts 1905

Riparian owners along watercourses navigable for large boats are authorized to hang gates at the bank across any road leading down the bank, excepting within the limits of towns and cities.

Comments:

Although the public has a right to navigate upon navigable waters, this does not include the right of access over or through the land of private persons.

ARTICLE V

INTER-RELATION OF PRIVATE AND PUBLIC PROPERTY RIGHTS

A. NAVIGABLE WATERS:

1. Navigability and its Meaning:

The issue and meaning of navigability in this area is of utmost importance. Professor G. Graham Waite, in his 1968 Report to the Indiana Water Resources Study Committee on Indiana Water Law, an excellent study, explained navigability in the following context:

> "Whether water is navigable or non-navigable is relevant in deciding several questions, for instance who has title to the bed of a lake or a stream, whether there are public rights to use a particular body of water, and whether a particular water course is subject to federal regulation. To decide each of these questions, it is necessary to know whether the water in question is navigable. But "navigable" is a word with many meanings, and to say that water is navigable for one purpose, such as deciding who has title to the lakebed, does not automatically mean that it will be navigable for another purpose, such as deciding whether the lake is subject to federal regulation. Thus, in deciding whether water is navigable, it is fundamentally important to define the context in which the problem arises, because the type of problem will determine which of several tests of navigability should be used; and which test is used will, of course, substantially determine whether the water is found to be navigable or non-navigable."
> Wait, G. Graham, Indiana Water Law and Suggestions for Action, (1968).

2. Power in Navigable Waters:

The Federal power over navigation arises under Article 1, Section 8, Clause 3 of the United States Constitution, commonly known as the "Commerce Clause."

Federal law, briefly stated, finds waters which are "navigable in fact" are navigable in law. The Daniel Ball, 77 U.S. 557 (1870). Waters "navigable in fact" are those which when used in natural and ordinary conditions are susceptible to use as highways of commerce over which interstate and foreign trade and travel are or may be conducted. U.S. v. Holt State Bank, 270 U.S. 49 (1926). This definition of navigability has been extended to include waters which once were navigable or waters which may become navigable with reasonable improvements. Oaklahoma v. Atkinson, 313 U.S. 508 (1941); U.S. v. Appalachian Power Co., 311 U.S. 377 (1940). The Federal power over navigation is traced to Gibbons v. Ogden, 22 U.S. 1 (1824) in which case Chief Justice Marshall wrote:

> "All America understand and uniformly understood the word commerce to comprehend navigation . . . (a) power to regulate navigation, is as expressly granted, as if that term had been added to the word 'commerce'." Gibbons v. Ogden, supra, at pages 190-193.

The authority of the United States is the regulation of commerce on the waters and this authority is as broad as the needs of commerce. U.S. v. Appalachian Power Co., 311 U.S. 377 (1940).

Federal jurisdiction over navigable waters has been

broadened more recently by a requirement upon the United States Corps of Engineers to exercise its permit authority to regulate discharges of dredged or filled materials into almost any watercourse which reaches a navigable water of the United States. National Resources Defense Council v. Callaway, 392 Fed. Supp. 685 (D.D.C. 1975) U.S. Army Engineer Regulation implementing Section 404 of the Federal Water Pollution Control Act (1972), published in Federal Register, July 25, 1975.

3. State Power in Navigable Waters:

The State of Indiana, like its sister states, has certain concurrent jurisdiction over navigable waters, has ownership of the beds of navigable waters, and has jurisdiction over most non-navigable waters and their intra-state commerce.

Indiana, along with other Great Lakes states, traces its sources of jurisdiction over navigable waters and their beds to federal acts and the doctrine of "equal footing."

By an act of 1783 (and the Deed of 1784), Virginia deeded to the United States the Northwest Territory, a region which included what is now the State of Indiana. After the American Revolution, each state became a sovereign, and in that character held absolute right to all of its navigable waters and the soil or land under them for the benefit of its citizens. Hardin v. Jordan, 140 U.S. 371 (1891).

The Deed of 1784 later was embodied in the Ordinance of 1787, which provided, among other things:

(a) All the navigable waters of the Mississippi and St. Lawrence River systems should be free for commerce and navigation, and

(b) All states later carved out of this Northwest region should be on an "equal footing" with the original states in all respects.

The Northwest Ordinance was superseded by the United States Constitution in September of 1787, which affirmed the "equal footing" doctrine.

> "Upon the admission of a state to the Union, the title of the United States to lands underlying navigable waters within the states passes to it, as incident to the transfer to the state of local sovereignty, and is subject only to the paramount power of the United States to control such waters for purposes of navigation in inter-state and foreign commerce." U.S. v. Oregon, 295 U.S. 1, at 14 (1935).

The U.S. v. Oregon, case, supra, further restated the law that the question of whether waters within a state under which lands lie are navigable or non-navigable is a federal one and not a local one since the effect upon the title to such land arises out of federal action in admitting the state to the union.

Since the federal power over navigable waters is not such a power which is exclusive to the Congress, or prohibited to the states, or incompatible with the exercise by the state of a similar power, the state reserves concurrent jurisdiction.

In Gilman v. Philadelphia, 70 U.S. 1 (1865), the City of Philadelphia wanted to construct a bridge over the Schuylkill River and an upper dock owner objected. The court affirmed the power of the state (and its political subdivision) to build the bridge as an action of the state in meeting its

interest and responsibilities in matters of commerce and transportation, after further finding that the federal government did not object on the grounds that such construction interfered with navigation.

Our earlier discussion related to waters which were "navigable in fact," either in their natural condition or after being improved and made suitable for use in inter-state commerce. The other class of navigable waters are those which have been declared "navigable" by the state legislature. The waters may be navigable only for intra-state commerce and only for certain distances or for limited types of craft. Over these, the state has exclusive jurisdiction and may authorize obstructions to be placed in the waters. DePew v. Trustees of the Wabash & Erie Canal, 5 Ind. 8 (1854); but cf. U.S. v. Holland, 373 F. Supp. 665

B. RIPARIAN RIGHTS IN NAVIGABLE WATERS:

1. Generally:

The rights of riparians on navigable waters differ in some material aspects from riparians on non-navigable waters.

The riparian owner of land generally does not own the bed of a navigable stream or lake unless he received the patent therefor from the State. As to patents issued by the federal government prior to statehood, the presumption is that the title to the bed of the water did not pass. See, Waite, G. Graham, Indiana Water Law, page 18.

A riparian on navigable waters:

> ". . . must in all cases be subordinate to the paramount public right of navigation, and such other public rights incident thereto. In other words, all the private or individual use and enjoyment of which the land is susceptible, subordinate to, and consistent with the public right, belong to the riparian owner as against any other person seeking to appropriate it to his individual use.'" Sherlock v. Bainbridge, 41 Ind. 35 (1872).

In addition to domestic purposes, the use of the riparian's land may include use of the water for milling. This right of a riparian to use the water power co-exists with the public right of navigation, but in conflict, the right of navigation is paramount. The riparian may make such other reasonable uses of the stream as do not materially interfere with navigation. See: Bissell Chilled Plow Works v. South Bend Manufacturing Co., 64 Ind. App. 1, 111 N.E. 932 (1916).

The public right of navigation and the Public Trust Doctrine, discussed later, do not disturb the riparian's property rights in the banks or beaches of the watercourse. There is no public easement of access to the navigable waters over the riparian's land unless such an easement has been acquired by grant or perscription. However, the public can use the banks or beaches of the watercourse to land a boat in time of necessity or peril. Clarke v. Evansville Boat Co., 44 Ind. App. 426, 88 N.E. 100 (1909); Sherlock v. Bainbridge, supra.

Among other rights of riparians on navigable water

is the right to the flow of water for reasonable use, which flow can not lawfully be diverted, increased or diminished. If the riparian is injured by such interference, an action may be maintained to abate or enjoin the nuisance. Bissell Chilled Plow Works v. South Bend Mfg. Co., supra. The riparian may reasonably use the water for any purpose provided that he does not obstruct or interfere with the public right of navigation. Sherlock v. Bainbridge, supra. The riparian generally has the right of access to the navigable part of the river from the abutting part of his tract. In the case of Peck v. City of Michigan City, 149 Ind. 6, 49 N.E. 800 (1898), the plaintiff owned docks in the Michigan City harbor. Sewage and sand from the sewers of Michigan City filled in the harbor basin making plaintiff's dock area non-navigable. The court stated that the negligent obstruction of navigable waters by the City to the damage of the riparian was an injury for which compensation must be made. While this riparian did not have a right to the submerged land or to the water as such, he had a right of usage and a right to the profit growing out of the depth of the navigable water as an easement incident to the ownership of the adjacent banks. See: Peck v. City of Michigan City, supra, (reversed on other grounds).

Riparian owners along navigable streams have the right to construct piers, wharves, or docks on the submerged

lands, provided that the same is in aid of and does not obstruct navigation and commerce. Illinois Central R.R. v. Illinois, 146 U.S. 387 (1892); Sherlock v. Bainbridge, supra; I.C. 13-2-4-4 (prohibiting obstruction). The right of riparian owners along Lake Michigan to reclaim or build upon the submerged lands of Lake Michigan is limited to the dock or harbor line, and is subject to the prior approval by the Indiana Department of Natural Resources through the issuance of a fill permit. I.C. 4-18-13-1 et seq.

Riparians generally have the right of access to navigable waters, including the right to wharf out to the point of navigability, subject to the rules and regulations which the state legislature may prescribe for the protection of the right of public. Illinois Central R.R. v. Illinois, supra. The City of Evansville, on the Ohio River, was held to have the power under her charter to establish water lines and make reasonable provisions for the protection of navigation. The City had enacted an ordinance which prohibited the erection of buildings below the high water mark on the Ohio River for the stated reason that such buildings might obstruct navigation. The Indiana Supreme Court ruled that this was a valid exercise of the police power. Martin v. City of Evansville, 32 Ind. 85 (1869). However, another part of the same ordinance prohibiting construction of buildings above the high water mark, without providing for just compensation, was declared to be an unconstitutional taking in violation

of the eminent domain statutes. Martin v. City of Evansville supra.

C. ACCRETIONS:

1. Introduction:

Under the doctrine of riparian rights, a riparian is entitled to any land added to his water frontage by accretion or reliction. Accretion is the process of gradual and imperceptible increase of land caused by the contiguous waters depositing earth, sand and sediment. Alluvion is the deposit of earth, sand and sediment which results from the accretion process. In Indiana, title to the land formed by accretion is generally vested in the riparian owner of the land to which the alluvion attaches. Town of Freedom v. Norris, 128 Ind. 377, 27 N.E. 869 (1891); Irvin v. Krammond, 58 Ind. App. 540, 108 N.E. 539 (1915). Reliction is the increase of land caused by the recession of the waters of a river or lake, and is also a source of title.

Avulsion, the opposite of accretion, is the sudden and rapid change of the course of a river by which the river abandons its old channel and seeks a new channel. There is a sudden shifting of the channel of a river which cuts off a body of land such that afterwards that body of land remains identifiable as land which existed before the shift, and which never became part of the river bed. An avulsion has no affect upon title to land. Longabaugh v. Johnson,

Ind. App. , 321 N.E.2d 865 (1975).

Co. of St. Clair vs. Lovingston, 90 U.S. 46 (1874) is a major decision on matters of accretion. The court, at page 68, said:

> " . . . alluvion may be defined as an addition to riparian land gradually and imperceptibly made by the water to which the land is contiguous. It is different from reliction and is the opposite of avulsion. The test as to what is gradual and imperceptible in the sense of the rule is, that though the witnesses may see from time to time that progress has been made, they could not perceive it while the process was going on.
>
> 'Whether it is the effect of natural or artificial causes makes no difference. The result as to the ownership in either case is the same. The riparian right to future alluvion is a vested right. It is an inherant and essential attribute of the original property. The title to the increment rests in the law of nature . . . If there be a gradual loss, he must bear it. if a gradual gain, it is his."

2. Accretions - Rationale:

There are many reasons submitted for the riparian right to accretions. The reasons are not mutually exclusive. often several will be discussed within one opinion supporting the right to accretions. These reasons can be organized generally into five major categories.

The first is deminimis non curat lex; that is, the law does not notice trifling matters. A second reason may be described as the "compensation or natural justice" theory. He who sustains the burden of losses of upland and of repairs to his property occassioned by his contiquity to the water

also ought to receive whatever benefits accrue to his property through the water.

A third reason suggests that it is in the interests of the community that all land have an owner. This productivity theory, which seeks the highest economic utility, would grant the alluvion to the riparian as the one able to make the best use of the land. The gradual and imperceptibly forming strip of land would be of little productive use in and by itself to anyone except the riparian to whom it would have great utility.

A fourth reason is the "natural right" analogy. This reason, proposed in the Lovingston decision, supra, is that just as the owner of the land has a right to the fruits of the trees, and the owner of animals has the right to their issue, the riparian has the right to alluvion as the natural product of land ownership adjacent to water.

A fifth reason is that the riparian owner has the right to accretions because his right of access to the water must be preserved.

3. Accretions - Choice of Law:

The rights relating to accretion or reliction, and avulsion, are ordinarily governed by the law of the state in which the process occurs as local law affecting property. St. Louis v. Rutz, 138 U.S. 226 (1891). Whether accretions are produced by unusual floods, or attached to land reclaimed by artificial means is generally a question which each state

must decide for itself. Barney v. Keokuk, 94 U.S. 324 (1876).

However, in recent years, the United States Supreme Court has used federal law rather than state or local law in determining the ownership of property resulting from accretions. In Hughes v. Washington, 389 U.S. 290 (1967), involving State of Washington ocean front land, Mr. Justice Black disposed of the choice of law question by saying:

> "The rule deals with waters that lap both the lands of the state and the boundaries of the international sea. This relationship, at this particular point of the marginal sea is too close to the vital interests of the nation in its own boundaries to allow it to be governed by any law but the 'Supreme Law of the Land'." Hughes v. Washington, supra, at page 293.

Mr. Justice Black stated that since Hughes was a successor in title to the original federal grantee, the question to be decided was what rights were conveyed by the federal grant an act done by the United States. This question, he said, ought to be answered under federal law. He then held that under federal law Hughes was entitled to the accretion that had been gradually formed along her property by the Pacific Ocean. See also. Borax, Ltd. v. Los Angeles, 296 U.S. 10 (1935). Mr. Justice Stewart, in his concurring opinion in the Hughes case, raises the complex "taking" question. The State of Washington, by a constitutional enactment in 1889, provided that henceforth all accretions along the Washington coast would belong to the State rather than to the private riparian owners. Mr. Justice Stewart

asked first whether such a prospective change in property law constituted a compensable taking, and if so, did the right to compensation "run with the land".

He then concluded that the "action" of the State constituted an attempt to transfer private to public property without payment of just compensation, which "action" is forbidden by the Due Process clause of the Fourteenth Amendment to the United States Constitution.

Is the choice of law federal rather than local whenever the property question affects the continental land boundaries of the United States? For federal law to be the choice, must there be a substantial federal right or interest involved? Would the Hughes decision supra, be applied to a Great Lakes state as it was to an ocean state? It is our opinion that in each of the foregoing the answer would be yes.

4. Accretion - The Bonelli Cattle Company Case:

The issues in Bonelli Cattle Co. v. Arizona, 414 U.S. 313 (1973), gave the United States Supreme Court an opportunity to re-examine the accretion doctrine as it related to inland navigable waters and changes occurring by artificial means. While the decision first appeared to offer some light to these issues, it later appeared to bring back the clouds.

In Bonelli, supra, the riparian owner's land was gradually moved eastward and reduced in size by the increasing spread of the Colorado River. It was conceded by all that the Colorado River is a navigable river, and that the State of Arizona was the owner of the river bed as the river

expanded and expanded.

In 1959, a Federal Bureau of Reclamation Project deepened and rechanneled the Colorado River in the area of the Bonelli land, thereby confining the stream of the river to a substantially reduced portion of land.

Bonelli sued to quiet title in itself to the land from which the river had withdrawn as a result of the rechanneling project. The first Arizona Appellate Court held with Bonelli, that the changes either were accretive and belonged to Bonelli, the riparian owner, or they were avulsive, and belonged to Bonelli, the former owner, under the doctrine of "re-emergence". See: Bonelli Cattle Company Company v. Arizona, 11 Ariz. App. 412, 464 Pac.2d 999 (1970).

The Arizona Supreme Court reversed, holding that under the "equal footing" doctrine and the Submerged Lands Act, a federal enactment, Arizona held title to the beds of all navigable streams within its borders. The federal rechannelization project was "an engineering relocation of the waters of the river by artificial means," said the court; therefor, it was avulsive, and Arizona was not divested of its title.

Upon review, the United States Supreme Court held that the ownership of the land was governed by federal law, and the land surfaced by the narrowing of the river bed belongs to Bunelli as a riparian owner. Bonelli Cattle Co. v. Arizona, 414 U.S. at 317 (1973).

The choice of law question was addressed by the Supreme Court. It held that local law determines the interest of riparian owners, but not in this case:

> "We continue to adhere to the principle that it is left to the states to determine the rights of riparian owners in the beds of navigable streams which under federal law, belong to the states. But this doctrine does not require that state law govern the instant controversy. The issue before us is not what rights the state has accorded private owners in lands which the state holds as sovereign; but rather, how far the sovereign right extends under the equal footing doctrine and Submerged Lands Act - whether the state retains title to the lands formerly beneath the stream of the Colorado River or whether that title is defeasible by the withdrawal of these waters.
>
> . . . in this case, the question of title as between the state and a private land owner necessarily depends upon a construction of a 'right asserted under federal law'." Bonelli Cattle Co. v. Arizona, 414 U.S. at 320 - 321 (1973).

The Court almost summarily held that the equal footing doctrine and the Submerged Lands Act had no application to the issue of title. But having determined that fed ral law applied because of the state's claim of title under this doctrine and law, the Court proceeded to apply federal common law to the issue of ownership.

After reviewing the common law relating to accretions and avulsion, and stating that federal law recognizes the doctrines of accretion and avulsion, the court seems to suggest that such a major man made project (rechannelization) sounds in avulsion but reasons in accretion.

". . . (although) under state law, an avulsion(,)

> . . . federal law must be applied with a view toward the limited nature of the sovereign's right in the river bed, and an analysis of the interest of the state in Bonelli, in light of the rationales for the federal common law doctrine of accretion and avulsion, compell the conclusion that as between the state, as owner of the river bed, and Bonelli, as a riparian owner, the surfacing of the subject land should be vested in Bonelli." Bonelli Cattle Co. v. Arizona, 414 U.S. at 328 (1973).

The Court, in discussing the vicissitudes of the riparian owner, pointed out that he is at the mercy both of natural forces and governmental forces. He loses by erosion. He loses the riparian character by the imposition of the navigational servitude. For these losses and limitations he receives no compensation. The Court concluded that, therefore, the riparian rather than the state should gain the land resurfaced in the course of such governmental activity where such resurfaced land is not necessary to the navigational project or to any navigational purpose.

The Bonelli decision, in our opinion, will hold more and more significance as government undertakes reclamation projects within a coastal zone. The straightening out of a river or the channeling of a watercourse will raise questions of ownership as to the resurfaced lands just as it did in Bonelli. The Supreme Court's apparent view is that such resurfaced land returns to the riparian owner unless such land is necessary for a navigational or related project or purpose. But in a footnote to its opinion, the Court was careful to limit possible extensions of its

decisions:

> "But we need not here determine whether, in a suit between private landowners (or in which the state claims title in some capacity other than as owner of the river bed), the differing interests of the parties might require a holding that the rechannelization should be treated as avulsion. Nor need we determine whether, in a suit between a riparian owner and a former owner of surfaced land, the former should take the property as an accretion or the latter as a re-emergence. It is only the state's claim to title under the equal footing doctrine which required the invocation of federal law to resolve the instant dispute." Bonelli Cattle Co. v. Arizona, 414 U.S., footnote 27 at page 330.

5. Accretion vs. Re-emergence:

Under the doctrine of re-emergence, when identifiable riparian land, once lost by erosion, subsequently re-emerges as a result of perceptible change in the river course, title to the surfaced land revests in its former owner. See: Arkansas v. Tennessee, 246 U.S. 174. The re-emergence doctrine has been accepted by several of the Great Lakes States. The Illinois and Ohio position is that the riparian does not lose his rights to the submerged tract if it is restored, either by artificial or natural means, and further, that a substantial lapse of time does not bar the owner's right to reclaim the land. Chicago v. Ward, 169 Ill. 392, 48 N.E. 927 (1897); Baumart v. McClure, 21 Ohio pp. 4921, 153 N.E. 211 (1926).

The contrary rule is that the surfaced land will not belong to the original riparian unless it begins to form along his shore.

There appears to be no decision in Indiana which discusses the concept of re-emergence.

6. Accretions - Artificial Influences and Other Responses:

The general rule is that a riparian takes title to new land formed against his tract provided that the riparian owner is not responsible for the construction or maintenance of an artificial influence upon the waters which causes the accretion. Co. of St. Claire v. Lovingston, supra; Bonelli Cattle Co. v. Arizona, supra.

This appears to be the rule in the neighboring Great Lakes states of Illinois and Ohio. Brundage v. Knox, 279 Ill. 540, 117 N.E. 123 (1917); State v. Lakefront East 45th Street Corp., 137 Ohio St. 8, 27 N.E.2d 485 (1940). In Michigan, the rule of law appears to grant the riparian title to the accretion regardless of his responsibility for the artificial structures in the water which create it. Klais v. Danowski, 373 Mich. 262, 129 N.W.2d 414 (1964).

In California, a tidal state, an opposite result applies. After first accepting the general rule as to riparians and accretions, the Court limits accretions to "natural causes", especially where the interests of the public in navigable water beds owned by California seaward of the main high water mark is in contest against the riparian.

> "Where, however, the accretion has resulted, not from natural causes, but from artificial means, such as the erection of a structure below the line of ordinary high water, there is made out a case of . . . encroachment, and the deposit of alluvion . . . does not inure to the

> benefit of the . . . upland owner, but the right to recover possession thereof is in the state . . . (It) retains its character as public land, being the nature of reclaimed or filled in tidelands." City of Los Angeles v. Anderson, 206 Cal. 662, 275 P. 789 (1929).

On the gulf coast of Florida, a municipality conducted a public erosion control and beach stabilization program which included a seawall. The seawall, after completion, resulted in an accretion to the land of the riparian. The City sought to enjoin construction on the accreted land by the riparian, and the riparian cross-sued to quiet title. The court held that the accretion induced artificially by the state or municipality in the exercise of its police power does not alter the general rule -- the accretion belongs to the riparian, whether caused by natural or artificial means, so long as not created by him. Bd. of Trustees vs. Medeira Beach Nominee, 272 So.2d 209 (1973).

In the Medeira Beach Nominee decision, supra, the court noted the existance of a statute of Florida which purported to vest in the state title to accretions caused by public works. The court found it did not have to decide the constitutionality of that state law as applied to riparians because the state law was enacted after the erosion project had begun. Consequently, it could not under any circumstances, be applied retroactively.

There is precedence for the position that a riparian who places an artificial structure in the waters (a wharf) with the consent or under the authority of a governmental

unit (the state legislature) has the right to accretions which occur as a result thereof. Roberts v. Brooks, 78 F. 411 (2nd Cir. 1897).

In this same connection, it should be noted that Indiana has statutory regulation and authorization for erection of structures along the shoreline of Lake Michigan, I.C. 4-18-13-1, and along a navigable stream, I.C. 13-2-4-5. However, there appears to be no Indiana decisions which consider this authority to erect structures and the consequent question of right to accretions.

7. Riparian's Right to Accretions from Dredging or Filling:

The state, as sovereign, is the owner of the bed of navigable waters. The riparian can acquire no rights by filling such submerged lands without the authorization of the state, except by the proper exercise of the riparian's rights to wharf out to the channel of navigability. Dietrich v. Northwestern Union Rwy., 42 Wis. 248 (1877). For a similar result in the case of dredging, see, Menomonie River Lumber Co. v. Seidl, 149 Wis. 316, 135 N.W. 854 (1912). In Dietrich, supra, a riparian along the Wisconsin shore of Lake Michigan built an embankment 85 feet in front of his property, and, notwithstanding longtime use, the court said he did not acquire title to it or to the intervening bed.

In another case, a riparian along the Michigan shore of Lake Michigan was enjoined from filling upon lots he contended he owned which were then submerged under water.

People v. Broedell, 365 Mich. 201, 112 N.W. 2d 517 (1961). In Broedell, supra, the court reaffirmed the Public Trust Doctrine as related to the beds of navigable waters, saying:

> "The title of a state to submerged lands in the Great Lakes is impressed with a trust for the benefit of the public. The state has a duty to protect that trust and may not surrender the rights of the people thereto." People v. Broedell, supra, 112 N.W.2d at 519.

Where the filling or reclamation of adjacent submerged soil was expressly permitted by legislative enactment (i.e. in Indiana under I.C. 4-18-13-1 as to Lake Michigan and I.C. 13-2-4-5 as to navigable streams), it would seem that the land filled and patent issued, if any, would create title or right of exclusive possession in the riparian. See: Illinois Central R.R. v. Illinois, 146 U.S. 387 (1892); also see: Miller v. Mendenhall, 43 Minn. 95, 44 N.W. 1141 (1890).

D. NAVIGATION SERVITUDE:

1. Definition and Rationale:

The corollary of the navigational power is the navigation servitude. The navigation servitude has been defined as "a shorthand expression for the rule that in the exercise of the navigation power certain private property may be taken without compensation." Morreale, Federal Power in Western Waters: The Navigation Power and the Rule of No Compensation, 3 Nat. Rls. J. 1 (1963).

The courts have advanced several theories to explain

this doctrine. One states that the exercise of the navigation power is not a taking of property because the riparian's title has always been a qualified one subject to the public right of navigation and piscary. Another reason submitted is that the riparian had knowledge of the superior federal right at acquisition and his purchase price reflected the probability of loss through government action. A final theory traces the navigation power from Roman law through Common law as a right superior to all private rights. See: Note - Public Right of Navigation and the Rule of No Compensation, 44 Notre Dame L. 236 (1968); Morreale, 3 Nat. Rls. J. 21; 21 A.L.R. 206, 216-226.

2. Navigation Waters Affected:

The commentators have criticized the foregoing theories and modestly challenged their validity. Nevertheless, the doctrine is well accepted. Over the years, the definition of which waters come under the navigation power, and therefore which waters have imposed upon them a navigation servitude, has expanded. In The Daniel Ball, 77 U.S. 557 (1870), water navigable in fact was defined as navigable in law. The definition was broadened to include waters which were once navigable, and was further expanded to include waters which may become navigable by making reasonable improvements. Arizona v. California, 283 U.S. 423 (1931); Economy Light & Power Co. v. U.S., 256 U.S. 113 (1921); U.S. v. Appalachian Power Co., 311 U.S. 377 (1940). As in other areas under the Commerce clause, the definition has

been expanded to include non-navigable streams which affect the navigable capacity of navigable streams. U.S. v. Rio Grande Irrigation Co., 174 U.S. 690 (1899).

3. Application of Doctrine to States:

Private rights are also subject to the right of the state, as sovereign, where such state action is not in conflict with the paramount action of Congress. In like fashion, the states have ruled that no compensation need be paid the riparian for damage occurring as a consequence of their exercise of the navigation power.

4. Navigation Servitude - Its Physical Limitations:

It has generally been held that the navigation servitude has its limits at the ordinary high water mark of a navigable water, lake or ocean. U.S. v. Kansas City Life Insurance Co., 339 U.S. 799 (1950).

When the bed of the river is so defined, the lands below the high water mark are subject always to the dominant or navigation servitude in the interests of navigation, and its exercise calls for no compensation. U.S. v. Willow River Power Co., 324 U.S. 499 (1945). The Federal government, for navigational purposes, can deal not only with the channel of the navigable stream, but it can alter the level of the water to any extent up to the ordinary high water mark without being answerable to the riparian for injuries to structures or uses below that level. U.S. v. Chicago, Milwaukee, St. Paul and Pacific R.R. Co., 312 U.S. 592 (1941).

5. Navigation Servitude - Limitation on Compensation for Taking Adjacent Properties:

The lands above the high water mark are sometimes referred to as fast lands, and their taking by the government requires just compensation, subject to certain limitations.

The limitations relate to the elements of damage for which compensation will not be allowed. In the case of U.S. v. Rands, 389 U.S. 121 (1967), the United States condemned fast lands of a riparian along the Columbia River in Oregon in connection with a federal lock and dam project. The riparian claimed damages, by reason of the taking, for his loss of sand, gravel, agricultural purposes, and for the loss of a port site.

The Supreme Court denied all of these elements of added value to his land. It held that when the fast lands are taken compensation is required; however, the government can disregard the values to such lands arising from access to the stream as not being proper elements for compensation. The interests of the riparian is subject to the government's power to control navigable waters, and the proper exercise of such power does not give rise to compensation.

In U.S. v. Virginia Electric and Power Co., 365 U.S. 624 (1961), the Supreme Court held that only values of a non-riparian nature were to be added as additional compensation for the taking of adjacent fast lands.

6. Navigation Servitude - Section 595a, Relief for the Condemnee:

Apparently in response to a congressional determination

that the judicial interpretation in the Rands decision, supra, was inequitable to the riparian, Section 595a was added to the Rivers and Harbors Appropriation Act in December, 1970. 33 U.S.C. Sec. 595a.

Section 595, adopted in 1918, provided that in all cases where private property is taken for public use in connection with any improvement of rivers or waterways in the United States, where in acquiring lands or easements for such improvements, and a part only is taken, the compensation for damages shall be reduced by any special or direct benefits to the remainder arising from the improvements. 33 U.S.C. 595; U.S. v. Commodore Park, Inc., 324 U.S. 386 (1945); U.S. v. River Rouge Improvement Co., 296 U.S. 411 (1926).

Section 595a, effective in determining just compensation in any proceedings after December 31, 1970, stated:

> ". . . the compensation to be paid for real property taken by the United States above the normal high water mark of navigable waters of the United States shall be the fair value of such real property based upon all uses to which such real property may reasonably be put, including its highest and best use, any of which uses may be dependent upon access to or utilization of such navigable water." 33 U.S.C. 595a.

Section 595a, continuing, states that in cases of partial takings, no depreciation in the value of any remaining real property shall be recognized and no compensation shall be paid for damages to the remainder which result from loss of or reduction of access from such remaining real property to

such navigable waters because of the taking.

Now, however, where the taking is total, the land improvements are to be valued with inclusion of those water-site elements previously denied to a riparian under the judicial limitation imposed by the navigation servitude.

7. Navigation Servitude - Examples of No Compensation:

There are no damages for any loss of land or structures lying between the low water and high water marks which are taken for navigational purposes. The damage to a railroad enbankment, U.S. v. Chicago, Milwaukee, St. Paul and Pacific R.R., supra, and the loss of oyster beds, Lewis Bluepoint Oyster Co. v. Briggs, 229 U.S. 82 (1913) represent instances in which compensation was denied even though damage was suffered.

Before Section 595a was adopted, certain elements of damage were denied riparians whose fast lands, above the high water mark, were taken for waterway improvements. Loss of access to the water, loss of a port site, loss of a power plant site, and loss of water power are examples of elements for which no compensation was added at the time of the taking of the fast lands. U.S. v. Rand, supra; U.S. v. Twin City Power Co., 350 U.S. 222 (1956); and U.S. v. Chandler-Dunbar Water Power Co., 229 U.S. 53 (1913).

E. THE MICHIGAN CITY HARBOR CASE: A CLASSIC EXAMPLE OF RIPARIAN RIGHTS VERSUS NAVIGATION SERVITUDE:

1. Generally:

Generally, sand beaches are renewed and restored by the

ebb and flow of tides, where tides occur, and wave action. In addition, beaches are renewed and nourished by the action of the currents moving downward along the shoreline, often referred to as the "littoral drift." Manmade obstructions within the lake along the shore, such as breakwaters, piers and groins, as well as extensions of land into the lake by fills can have the effect of interrupting nature's form and method of beach renewal and nourishment.

2. The Michigan City Harbor Structures:

Over the years, the harbor of Michigan City has been improved for navigation purposes by the construction of breakwaters, artificial fill, and other manmade activities. Beginning in 1970, the Corps of Engineers was directed to survey the shoreline of Lake Michigan in the State of Indiana in the interest of beach erosion control and related purposes. Just prior thereto, the Corps of Engineers was directed to investigate the affect of the Michigan City harbor structures on the adjacent shorelines.

The latter report concluded that the Michigan City harbor structures have interrupted the littoral drift in the harbor area and are partially responsible for the erosion, damage, and downdrift of the Michigan City harbor. In response to both problems, the Corps of Engineers directed that a detailed project study be incorporated into an overall Indiana shoreline erosion study, particularly in compliance with section 111 of the 1968 River and Harbor Act. 33 U.S.C.

426(i).

An interim report was published in October of 1975. Interim Report on Indiana Shoreline Erosion, Detailed Interim Feasibility Report, October, 1975.

The interim report limited its investigation of the erosion problems along the shore between the east boundary of Michigan City's Washington Park and the east boundary of the Indiana Dunes State Park. The shoreline is approximately seven miles long and contains the most severe erosion problem in the entire study area. In addition, the influence of the Michigan City harbor structures on the erosion problems of the downdrift shore is limited to this same seven mile long area.

3. Interim Shore Construction and Proposed Shore Construction;

In 1973, the National Parks Service was authorized to, and the Corps of Engineers on its behalf, constructed 13,000 linear feet of rock or stone revetmant upon the lakeward side of Lakeshore Drive lying generally north of the Town of Beverly Shores. In addition, the Corps of Engineers placed about 340,000 tons of sand along the 3,000 foot shoreline at Mount Baldy, just east of the Michigan City harbor.

The 1975 interim report, among many alternatives, selected for construction implementation a partial beach nourishment plan. This would provide only partial protection and would limit the protection to that portion of the erosion problem attributable to the Michigan City harbor structures.

The existing interim revetment would remain and be strengthened at its present points of stress. Initially, 1.7 million cubic yards of sand beach fill material would be excavated from a potential borrow area located updrift of the Michigan City harbor and pumped to shore to form a protective beach area from the east end of the existing revetment eastward to the Northern Indiana Public Service property lying just east of Mount Baldy in Michigan City. Periodic sand nourishment would be required, but the actual nourishment would be made every ten years in an amount approximate to that initially laid. Although this plan is considered one of the lower cost plans, it is, like the others, not economically justified from a cost-benefit analysis.

4. Legal Matters:

Prior to the construction on the interim shore protection plan involving the stone revetment and the sand nourishment, the State of Indiana and the United States of America entered into a license agreement under which the State of Indiana granted a license to the United States of America to use and occupy certain tracts, submerged lands of Lake Michigan immediately off shore, on which to construct the stone revetment and to construct the experimental beach nourishment sand fill. The license agreement was dated August 28, 1973, and executed at that time on behalf of the State of Indiana by the Director of the Department of Natural Resources, and on behalf of the United States of America by the Regional Director of the National Park Service. Subsequently, in

September, 1975, the signatures were notarized, and the agreement approved by the Governor of the State of Indiana. The agreement has a fixed term of ten years. The United States of America agrees to cover or remove its revetments in the event that the levels of the Lake are such that the beaches are restored, and further agrees that at said time it will make no clsim of interest in any of the property or beaches so restored. The United States of America acknowledges that it has no claim, interest or estate whatsoever by reason of the license granted by the State of Indiana or by reason of its use and occupancy of the submerged lands.

The bed of Lake Michigan is owned by the State of Indiana and the revetment and placement of sand is upon the land owned by the State. It would appear that this construction is not directly related to navigation or navigational purposes and as such, the navigational servitude would appear not to be applicable. The National Park Service, as the administrator of the Indiana Dunes National Lakeshore, is treated as a riparian owner seeking to protect its property from shore erosion. These matters have been reduced to writing probably because the State of Indiana was concerned of the magnitude of the project, and the fact that the United States of America was doing the construction. In addition, such a writing would negate any implication that such construction was authorized under I.C. 4-18-13-1, the right of a riparian to fill in and reclaim submerged land adjacent to the Lake within the width of his ownership.

In section 5 of the license agreement, it is stated that upon the restoration of beaches, the same shall remain in perpetuity in the name of the State of Indiana. This would appear to be inconsistent with the general law of Indiana and the common law of the United States in relation to accretions, and more particularly in this instance to reliction. Ordinarily, the abutting riparian owner, in this case the United States of America as owner of the Indiana Dunes National Lakeshore, would be the owner of the restored beach. Likewise, the riparian owner in front of Mount Baldy would be the owner of the beach artificially nourished. The United States of America may have transferred its right to such accretions to the State of Indiana in consideration of the license granted it to do the construction work.

The long range plan for partial beach nourishment by placing 1.7 million cubic yards of sand fill east of the existing revetments, and then nourishing it periodically every ten years, also raises legal considerations.

While the interim report states that this plan is consistent with the desires of the Park Service and its plans for development of the Indiana Dunes National Lakeshore, the scope of the plan is to mitigate the erosion problem attributable to the Michigan City harbor structures. Interim Report on Indiana Shoreline Erosion, at page D-35. As such, 33 U.S.C. §426i authorizes the Secretary of the Army, acting through the Chief of Engineers, to construct projects for

the mitigation of shore damages attibutable to federal navigation works. The entire cost of such construction is to be borne by the United States.

Since the long term construction plan may be viewed to relate to navigation and navigational purposes, i.e. the mitigation of damage from Michigan City harbor navigation structures, a similar license agreement may not be required between the United States and the State of Indiana. However, the source of the potential sand borrow is the bed of Lake Michigan east of the Michigan City harbor. The removal of sand from the bed of Lake Michigan ordinarily is an act controlled by the State of Indiana. The site of the potential sand borrow is removed from the site of the work, and at that site, it is not necessary for navigational purposes. The purchase or the conditional acquisition of such sand borrow may be required of the United States by the State of Indiana.

Once the artificial sand nourishment program is completed, it appears clear that the expanded beach area is an accretion, the title to which ordinarily would be in the riparian owner. In this instance, the United States is both a riparian owner, (Department of Interior - Park Service) and also responsible for the artificial influence which created the shore erosion and required the sand nourishment (Department of Army - Corps of Engineers). Notwithstanding, it would appear that the Indiana Dunes National lakeshore and other property owners along the area to be nourished artificially by borrowed sand,

as riparians, would take title to the new land formed against their tracts. See: Bonelli Cattle Co. v. Arizona, 414 U.S. 313 (1973); Board of Trustees v. Medeira Beach Nominee, 272 S.2d 209 (1973), 63 A.L.R.3d 241.

VI.

PUBLIC PROPERTY RIGHTS

A. PUBLIC TRUST DOCTRINE:

1. The Historical Background:

The Public Trust Doctrine received much attention in Roman and English Law. The nature of property rights in rivers, the sea and the seashore had its historical beginnings under these early legal systems, and they represent the source of the modern American Public Trust Doctrine.

Professor Joseph L. Sax, in 68 Mich. L. Rev. 473 (1970) described this historical background.

> "First, certain interests, such as navigation and fishing, were sought to be preserved for the benefit of the public; . . . second, while it was understood that in certain common properties - such as the seashore, highways, and running water: 'perpetual use was dedicated to the public,' it has never been clear whether the public had an enforceable right to prevent infringement of these interests. Although the state apparently did protect public uses, no evidence is available that public rights could be asserted against a recalcitrant government.
>
> "In England, the history of public uses is closely involved with a struggle between the Crown and Parliament. . .
>
> "But it is important to realize that the inability of the sovereign to alienate Crown lands was not a restriction upon government generally, but only upon the King: . . ."

Thus, whatever restraints the law might have imposed

upon a King, it was nonetheless within the authority of Parliament, exercising what we would call the police power, to enlarge or diminish the public rights for some legitimate public purpose. Professor Sax, continuing:

> "As carried over to American law, this history has produced great confusion. Our system has adopted a dual approach to public property which reflects both the Roman and the English notion that certain public uses ought to be specially protected. . ."

It has been a general rule that land titles from the federal government run down only to the high water mark, with title seaward of that point remaining in the states. The states, upon their admission to the Union, took such shorelands in "trusteeship" for the public. Shively v. Bowlby, 152 U.S. 1 (1894).

> "Whether and to what extent the trusteeship constrains the states in their dealings with such land has, however, been a subject of much controversy. If the trusteeship puts such lands wholly beyond the police power of the state, making them inalienable and unchangeable in use, then the public right is quite an extraordinary one, restraining government in ways that neither Roman nor English law seems to have contemplated. Conversely, if the trust in American law implies nothing more than that state authority must be exercised consistent with the general police power, then the trust imposes no restrain on government beyond that which is implicit in all judicial review of state action - the challenged conduct, to be valid, must be exercised for a public purpose and must not merely be a gift of public property for a strictly private purpose.
>
> "The question, then, is whether the public trust concept has some meaning between the two poles; whether there is, in the name of the public trust, any judicially enforceable right

which restrains governmental activities dealing with particular interests such as shorelands or parklands, and which is more stringent than are the restraints applicable to governmental dealings generally.

"Three types of restrictions on governmental authority are often thought to be imposed by the public trust: first, the property subject to the trust must not only be used for a public purpose, but it must be held available for use by the general public; second, the property may not be sold, even for a fair cash equivalent; and third, the property must be maintained for particular types of uses. . .

"These three arguments have been at the center of the controversy and confusion that has swirled around the Public Trust Doctrine in American law. Confusion has arisen from the failure of many courts to distinguish between the government's general obligation to act for the public benefit, and the special, and more demanding, obligation which it may have as a trustee of certain public resources." Sax, Joseph L: The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention, 68 Mich. L. Rev. 473, 475-478

2. Public Trust Doctrine - Application to Great Lakes States:

The lands and waters of the Midwestern United States were once part of a region known as the Northwest Territory, from which the present states of Indiana, Illinois, Wisconsin and Michigan were carved. By an Act of 1783, under the Deed of 1784, this territory was deeded to the United States by the State of Virginia. This deed later became embodied in the Ordinance of 1787, commonly known as the Northwest Ordinance. The Northwest Ordinance, enacted in July of 1787, provided in part, that all states to be created out of this region should be on an "equal footing" with the original 13 states in all

respects. The Northwest Ordinance was superseded by the United States Constitution in September of 1787, and the Constitution affirmed the "equal footing" doctrine. Following the American Revolution, the 13 Colonies became independent sovereigns, and in this character they succeeded to the incidence of sovereignty and the prerogatives which had belonged either to the Crown or to Parliament. They retained these upon the formation of a Union subject to those rights surrendered to the federal government in the United States Constitution. Dudsik, Law of the Seashore, the M.I.T. Press, 1972, page 90.

> "By the time of the Magna Carta, private ownership . . . had proliferated to the nation's waterways. This initiated a gradual expansion of public rights in tidelands and navigable waters, which culminated in the application of the "Public Trust" theory to these areas by the English common law. Under the Public Trust, certain public rights . . . were reserved or held "in trust" for the common use and benefit of the public even if the proprietary title had been granted to individual subjects. Such was the state of the English law at the time of the American Revolution." Dudsik, supra, at pages 89-90.

The English distinction between tidal and non-tidal waters has been modified by most American courts to a distinction between navigable and non-navigable waters for geologic and geographic reasons. See: King, Lauer, Ziegler, "Michigan Water Law" from Conference on Water Resources and the Law, September 4 - 6, 1957, University of Michigan Law School.

". . . While the particular English experience

which gave rise to the controversy over those interests (fishery and navigation) was not duplicated in America, the underlying concept was readily adopted. Thus, American law courts held it "inconceivable" that any person should claim a private property interest in the navigable waters of the United States." Sax, The Public Trust Doctrine, supra, at page 484.

3. The Illinois Central Railroad v. Illinois case, a landmark for American Public Trust Doctrine:

The judicial interpretation of the historical background of the Public Trust Doctrine and the determination of its application to the State of Illinois, and thereby to the sister Great Lakes States carved out of the Northwest Territory, was made in the decision of the United States Supreme Court in Illinois Central R.R. v. Illinois, 146 U.S. 387 (1892).

Under the facts of the case, in 1869 the Illinois legislature made an extensive grant of submerged lands, in fee simple, to the Illinois Central Railroad. The grant included all the land underlying Lake Michigan for one mile out from the shoreline and extending one mile in length along the central business district of Chicago, an area containing more than 1,000 acres and comprising virtually all of the entire commercial waterfront of the City. By 1873, the Illinois legislature repealed the 1869 grant and then brought an action at law to have the original deed declared invalid.

The decision was in favor of the State of Illinois upholding its claim to title on the ground that the express

conveyance of these lands was beyond the power of the State legislature. The court stated that the State of Illinois held title to the navigable waters of Lake Michigan in a character different from that which the State holds land intended for sale. Continuing, the court said:

> "It is a title held in trust for the people of the State that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein free from the obstruction of interferences of private parties." Illinois Central R.R. v. Illinois, 146 U.S. at 452.

In this 1892 Illinois Central decision, supra, the court posed the question as to whether the legislature was competent to deprive the State of its ownership of the submerged lands in the harbor of Chicago, or of the control of its waters, or to allow the railroad to hold it against any future exercise of power by the State. It answered its question in the negative.

> "That the State holds the title to the lands under the navigable waters of Lake Michigan, within its limits, in the same manner that the State holds title to soils under tidewater, by the common law, we have always shown, and that title necessarily carries with it control over the waters above them whenever the lands are subjected to use. But it is a title different in character from that which the state holds in lands intended for sale. It is different from the title which the United States holds in the public lands which are open to pre-emption and sale. It is a title held in trust for the people of the state that they may enjoy the navigation of the waters, carry on commerce over them, and have the liberty of fishing therein free from the obstruction or interference of private parties. The interests of the people in the navigation of the waters and in commerce over them may be improved in many instances . . . for which

> purpose the state may grant parcels of the submerged land; and so long as there are dispositions made for such purpose, no valid objections can be made to the grants . . . But that is a very different doctrine from the one which sanctioned the application of the general control of the state over lands under the navigable waters of an entire harbor or bay, or of a sea or lake. Such application is not consistant with the exercise of that trust which requires that government of the state preserve such waters for the use of the public. The trust devolving upon the state to the public, and which can only be discharged by the management and control of the property in which the public has an interest, cannot be relinquished by a transfer of the property."

In another decision seven years later involving the Illinois Central Railroad and the City of Chicago, the Supreme Court drew a similar conclusion as to an area of only four or five acres. Illinois Central R.R. v. Chicago, 176 U.S. 646 (1900). While the earlier decision rested largely on the size and value of the tract which the State had conveyed, this later decision held that the railroad could not acquire shallow off shore submerged lands to build its facilities unless the authority to do so was granted in the clearest and most unmistakeable language. The Court then held that such authority was not so granted. In this later decision, the Court affirmed the first Illinois Central Railroad case as the law in Illinois, but focused in with respect to the City to the lack of a clear legislative intent to make a disposition. The Court appeared to qualify the earlier ruling by saying that the State may dispose of public trust lands if the useage for which the grant is made is

not injurious to the public interest, and if the intent to make such a grant is expressly manifest.

4. Public Trust Doctrine - Is it a Local Property Issue?

The language in Illinois Central R.R. v. Illinois, supra, was clear that the State took title to the navigable waters at the time of statehood under a "public trust." Nevertheless, decisions made shortly thereafter suggested that whether the State accepted a public trust doctrine was a question of local law, a property issue, with regard to which the decisions of the State Courts were to be conclusive. Illinois Central R.R v. Chicago, 176 U.S. 646, at 659 (1900); Shively v. Bowlby, 152 U.S. 1 (1894).

In each of the above cases, a quotation from Hardin v. Jordan, 140 U.S. 371 (1890), is made to support the proposition. The quotation is as follows:

> ". . . But it depends on the law of each state as to what waters and to what extent this perogative of the state over the lands under waters shall be exercised." Hardin v. Jordan, supra, at 382.

This quotation was not made by the court in the Hardin decision as to the acceptance or non-acceptance of the Public Trust Doctrine. Rather, this quotation was part of a larger paragraph which raised the question as to whether the state would accept the English common law rule of navigability or accept the enlarged American rule.

The Hardin decision, supra, in context, reads as follows:

> "This right of the states to regulate and control the shores of tidewaters and the land

> under them, is the same as that which is exercised by the Crown in England. In this country, the same rule has been extended to our great navigable lakes, which are treated as inland seas; and also, in some of the states, to navigable waters, as the Mississippi, the Missouri, the Ohio, and, in Pennsylvania, to all the perverent rivers of the State; but it depends on the law of each state to what waters and to what extent this prerogative of the state over the lands under waters shall be exercised. In the case of Barney vs. Keokuk, 94 U.S. 324, we held that it was for the several states themselves to determine this question, and that if they chose to resign to the riparian proprietor rights which property belonged to them, in their sovereign capacity, it is not for others to raise objections."

What has occurred in some later decisions is the lack of proper context for the quotation made. The correct legal property law issue is: which definition of navigable waters is to be employed within the Public Trust Doctrine, not whether or not the Public Trust Doctrine is to be accepted by the state.

5. The Public Trust Doctrine in Indiana:

Indiana has had no decision which presents the matter of the Public Trust Doctrine in this State in clear and unequivocal terms. Unlike our sister Great Lakes states which speak to a Public Trust Doctrine in many cases and under varying factual circumstances, Indiana offers almost no discussion of significance.

In a very early decision, Cox v. State, 3 Blackf. 193 (1833), the Indiana Supreme Court spoke in "trust" terms. A case involved a criminal prosecution of a defendant for maintaining a dam across the White River which completely

blocked navigation. Following his conviction, the defendant appealed arguing that the statute could not apply to the White River because the river was declared a public highway and forever free under the Northwest Ordinance. The court affirmed the conviction and held that the state had authority to compel the removal of the obstruction to navigation. In speaking of the navigable river, the court said:

> ". . . The possession, use and occupation, have been granted to the citizens of the several states and the territories of the Union, and the United States stands seized, to their and each of their use and benefit, for the purposes contained in the grant (of title to the beds of navigable waters)."

and later:

> ". . . except that she (state) is prohibited by compact, from the right of converting them to any other use than public highways, and obstructing them with any artificial obstruction . . ." Cox v. State, supra, 3 Blackf. at 196 (1833).

Two other Indiana decisions presented factual circumstances under which, in our opinion, the court could have expressed "public trust" doctrine language, but elected to decide the issues on more narrow grounds.

In Lake Sand Co. v. State, 69 Ind. App. 439, 120 N.E. 714 (1918), the Attorney General sued to enjoin a non-resident corporation for removing sand and gravel from the bed of Lake Michigan. It was the defendant's theory, and he so conceded, that the bed of Lake Michigan is held by the State of Indiana in trust for the public. He then said that he

was doing no more than any other person might do, and until the activity of removing sand and gravel was regulated by the State, no restraint was possible. The court upheld the injunction and answered the defendant by stating that "citizens" refer to Indiana and not to the nation, and that as a foreign corporation, the defendant is not a citizen under the Constitution to gain the privileges and immunities of the citizens of several states.

In State ex rel. Indiana Department of Conservation v. Kivett, 220 Ind. 623, 95 N.E.2d 145 (1950), a suit was brought to enjoin removal of sand and gravel from the White River. At the time of suit, the White River was not navigable. In affirming the injunction, the court said that the question of navigability was to be determined at the time that Indiana became a state, and that at such time the White River was in fact navigable. Therefore, Indiana owned the bed of the water, and any removal of the sand and gravel required its prior permission.

By an Act of 1919, the Indiana State legislature created a Department of Conservation which had among its powers relating to land and waters, the "general charge and supervision of the navigable streams and water courses of the state within the government survey meanderlines. . ." See: I.C. 14-3-1-14. In 1929, this section was amended to read "to have general charge and supervision of the navigable waters of the state . . .", and it has been amended further to

"to have general charge and supervision of the navigable waters of the State, including, but not limited to, making of rules and regulations pertaining to the carrying, transporting, or discharge of guns and firearms, fishing, and hunting activities upon, or within 500 yards, of said navigable waters as the same shall appear necessary and appropriate therefor, having due regard to considerations of public health and safety and recommendations of the Conservation (Natural Resources) Department, Division of Fish and Game." I.C. 14-3-1-14(9).

Among other powers which have continued in the Department since 1919, is the power to issue permits to take sand, gravel and other minerals from the bed of any navigable waters of the State. I.C. 14-3-1-14(10). Also, there are provisions for the payment of the permit fee and the payment of an amount for the reasonable value of the sand, gravel and other minerals taken.

In 1947, the Indiana State legislature declared certain public rights in natural resources and natural scenic beauty of Indiana:

> "The natural resources and the natural scenic beauty of Indiana are declared to be a public right, and the public of Indiana is hereby declared to have the vested right in the preservation, protection and enjoyment of all the public fresh water lakes of Indiana in their present state, and the use of such waters for recreational purposes." I.C. 13-2-14-1

In defining the terms, the legislature said:

"The natural resources of public fresh water

> lakes shall mean the water, fish, plant life and minerals, and the natural scenic beauty shall mean the natural condition as left by nature without man made additions or alterations." I.C. 13-2-14-2.

In defining public fresh water lakes as all lakes which have been used by the public with the acquiescence of any or all riparian owners, the Act specifically excluded Lake Michigan and excluded any lake lying wholly within the corporate limits of any city in Lake County, Indiana.

Again in 1955, the Indiana State legislature made certain declarations with regard to the water resources of the state:

> "It is hereby declared that the general welfare of the people of the State of Indiana requires that surface water resources of the State be put to beneficial uses to the fullest extent and that the use of water for nonbeneficial uses be prevented. . . to the end that the best interest and welfare of the people of the state will be served." I.C. 13-2-1-1.

> "Water in any natural stream, natural lake or other natural body of water in the state of Indiana which may be applied to any useful and beneficial purpose is hereby declared to be a natural resource and public water of the State of Indiana and subject to control and/or regulation for the public welfare as hereinafter determined by the general Assembly of the State of Indiana. . . " I.C. 13-2-1-2.

In 1951, the State Legislature declared such a public policy with respect to ground water resources of the State, and provided for its regulation by the Department of Natural Resources. I.C. 13-2-2-2.

The cases cited above and the declarations of public

policy made by the State legislature do not evidence a clear and convincing recognition of the Public Trust Doctrine. Notwithstanding, constantly changing political, social and economic conditions bring new issues to the courts for interpretation and decision. The law is a reflection of the needs of society, and in many respects, society creates the law.

As Judge Krentzman stated in U.S. v. Holland, supra, in discussing the intention of the Congress to expand to its limits the power over waters of the United States:

> "The Court realizes that the thought of preserving hugh stretches of coastline in a natural state and forbidding all commercial development in coastal areas is unrealistic. This is a societal choice which the government must observe. But the government can and should insure that the public interest in protecting all life forms is at least considered in the development plans. Any expense that might be incurred by the evaluative process will be dwarfed by the cost of neglecting the ecological interests." 373 F. Supp. at 676.

Public concern about natural resources and the environmental quality is being felt at all levels of government and society, and the enforcement of public rights in these natural resources is being presented daily in our courts. Within this context, what may have been considered ten, twenty or thirty years ago as a purpose which would serve the public and to which the navigable waters of the State of Indiana might be used, may today be considered totally unfit for public purpose.

6. Uses Approved in Public Trust Doctrine States:

Illinois and Wisconsin, as well as Michigan, have long accepted the doctrine of Public Trust in navigable waters as a part of its law. Likewise, so has the State of Michigan. These state legislatures have authorized the disposition of the submerged lands for differing purposes, and several have been subject to scrutiny by the courts.

In 1958, the Illinois Supereme Court approved the use of lands reclaimed from the bed of Lake Michigan for construction of the McCormick Place in Chicago, saying:

> "We recognize that submerged lands reclaimed are impressed with a trust in the public interest. However, the facility here contemplated is in the public interest and has been approved by the proper authorities. Under circumstances such as these we find no violation of that trust." Fairbank v. Stratten, 14 Ill.2d 307, at 319 (1958).

The Supreme Court of Illinois was again called upon to consider the Public Trust Doctrine in connection with the conveyance of 196.40 acres of submerged Lake Michigan bed to the United States Steel Corporation. The court, in Droste v. Kerner, 34 Ill.2d 495, 217 N.E. 2d 73 (1966), first held that the taxpayer plaintiffs had no standing to raise the public trust issue, but went on to discuss it at some length in rejecting the argument:

> "It was well settled, prior to the Constitution of 1870, that subject to the paramount power of the federal government over commerce, including navigation, title to the lands submerged by the waters of Lake Michigan

> lying within the boundaries of Illinois rested in the State of Illinois in trust to protect the rights of the public in the use of those navigable waters for fishing, boating, recreation and other public purposes. This did not mean, however, that the shoreline was required forever to remain unchanged except by natural causes. An equally important part of the doctrine was that the state might from time to time relinquish its trust as to specific parcels of submerged land by action of the General Assembly in granting to a shore owner title to those lands adjacent to his property where the grant was in aid of commerce and where the public interest in the lands and waters remaining was not substantially impaired . . .
>
> "The proper execution of this public trust with respect to submerged lands requires that the conveyance of any particular parcel to a shore owner be consistent with the public interest and not impair the interest of the public in the lands and waters remaining."

The court further stated that the legislature had found that such a grant was made in aid of commerce and would create no impairment of the public interest in the lands and waters remaining, but would instead result in the conversion of otherwise useless and unproductive submerged land into an important commercial development to the benefit of the people of the State of Illinois.

In 1970, in the case of Paepcke v. Public Building Commission, 46 Ill.2d 330, 263 N.E.2d 11, (1970) the Supreme Court of Illinois reversed its position in Droste, supra, respecting the standing of a taxpayer to sue to protect the public interest, saying:

> "Upon serious reconsideration of this question we now believe that portion of the opinion in

> Droste dealing with the right and standing of the plaintiff to sue should be overruled, as should any other former decisions of this court holding that a citizen and taxpayer has no right, in the absence of statute, to bring an action to enforce the trust upon which public property is held unless he is able to allege and prove special damage to his property. If the "public trust" doctrine is to have any meaning or vitality at all, the members of the public, at least taxpayers who are the beneficiaries of that trust, must have the right and standing to enforce it. To tell them that they must wait upon governmental action is often an effectual denial of the right for all time." Paepcke, supra, 46 Ill.2d, at 343, 344.

The Supreme Court of Wisconsin, it is suggested by Professor Sax, has made a better effort to work out a reasonable meaning for the Public Trust Doctrine than the courts of any other state. In one of its earliest cases, Priewe v. Wisconsin State Land and Improvement Co., 93 Wisc. 534, 67 N.W. 918 (1896), the court struck down a statute which allowed a scheme by which a promoter would drain a navigable lake and obtain the title to the underlying land. After first deciding that whether a particular act is for a public or private purpose is the province of the judiciary, the court said:

> ". . . If the state had power . . . to convey and relinquish . . . all its right, title and interest in and to all lands lying within the limits of Muskego Lake, then it may, in a similar manner, convey and relinquish to private persons or corporations all such right, title and interest in and to every one of the 1,240 lakes in Wisconsin." Priewe, supra, 93 Wis. at 552, 67 N.W. at 922.

Such an extension, concluded the court, simply could not be viewed as a lawful exercise of legislative power by

the sovereign holding such resources in trust for the public. Over the following years, the Wisconsin courts developed the concept that public trust lands can be devoted to private uses only if there is a clear justification for the change, and in the process of refinement of that concept now consider five factors to be considered in Public Trust Doctrine cases:

1. Public bodies will control the use of the area;

2. The area will be devoted to public purposes and open to the public;

3. The diminution of lake area will be very small compared with the whole of the water involved;

4. No one of the public uses of the water, as a stream or lake, will be destroyed or greatly impaired;

5. The disappointment of those members of the public who may desire to boat, fish or swim in the area to be filled is negligible when compared with the greater convenience to be afforded to those members of the public who use the new purpose.

One of the earlier cases leading to the enunciation of these five factors and involved in the process of refinement of the Wisconsin doctrine, was the City of Milwaukee's proposed exchange of land with a private steel company in order to obtain shoreland for development of the city's harbor. City of Milwaukee v. State, 193 Wis. 423, 214 N.W. 820 (1927). The court found that the filling of a relatively few acres of Lake Michigan would not have a substantial impact on local public uses. The court found the exchange

economically fair and further found the goal of developing a public harbor to be of considerable benefit to the whole of the affected public. In addition, the loss of swimming and fishing in the area was modest and these activities could easily be engaged in nearby unfilled areas.

As Professor Sax explains:

> ". . . The doctrine which the court adopts is not very important; rather the court's attitudes and outlook are critical. The "public trust" has no life of its own and no intrinsic content. It is no more - and no less - than a name court's give to their concerns about the insufficiencies of the democratic process." 68 Mich. L. Rev. at 521

7. <u>I.C. 4-18-13-3 - The Lake Michigan Fill Statute</u>:

In 1907, the Indiana State legislature adopted an act authorizing the owners of land bordering upon the waters of Lake Michigan in this state to fill in, reclaim and own the submerged land covered by the shallow waters adjacent to and between such land and the dock or harbor line established by the United States. The present statute is as follows:

> "The owner or owners of land, or the owner or owners of any easement for public park purposes in, over or through any land bordering upon the waters of Lake Michigan shall have the right to fill in, reclaim and own the submerged land adjacent to and within the width of his land so bordering upon such lake and between the shore and the dock or harbor line that is or may be established by the United States or the proper officials thereof; and may build docks, wharves and other structures thereon for industrial, manufacturing, trade, commercial and public purposes;

> and in aid of manufacturing, trade, commerce and navigation; and to facilitate the landing, storing and handling of articles used in manufacturing, trade and commerce; and may lay out, establish, use and maintain public parks, playgrounds, bathing beaches and other public grounds thereupon for recreation and pleasure; and when said land is so filled in such owner shall own such land so filled in and approved; and those holding an easement over land and filling, shall have the same right over said land filled as they have over the adjoining land: provided, that the owner or owners of any such easement shall acquire only a like easement over such filled in lands."
> I.C. 4-18-13-1

The Act of 1907, up until 1973, provided as follows with respect to the method of completing the fill improvement.

> "Any owner or owners of land abutting upon the shore of said lake, wishing to avail himself or itself of the provisions of this chapter, shall cause an accurate survey of plat to be made by the county surveyor of the county wherein said land lies of the land between his land and said dock or harbor line, or so much thereof as such owner may desire to fill in and improve, and upon filing such survey and plat of such land, duly certified by said surveyor with the secretary of state, the natural resources commission with the approval of the governor of the state shall issue to such owner or owners authority to fill in and improve such lands; and, upon the filling in and improvement thereof, and the filing of good and sufficient evidence that the same has been done, in the office of the secretary of state, and upon paying the state treasurer the sum of one hundred dollars ($100.00) per acre for the land so filled in, such owner or owners shall receive from the state a patent, signed by the governor, and attested by the secretary of state, with the seal of the state thereon, vesting in such owner or owners, or their heirs, executors, administrators, successors or assigns, the title to so much as has been filled in and so improved."
> I.C. 4-18-13-3.

In 1973, I.C. 4-18-13-3 was amended by substituting the

word "may" for the word "shall" with respect to the Natural Resources Commission issuing authority to fill in and improve the land.

Prior to 1973, many permits were issued under these sections, and most were issued to major steel manufacturing companies. In the course of the past years, hundreds of acres have been filled into Lake Michigan from the Illinois State line to the eastern limits of the City of Gary. We are informed that there are several permits outstanding authorizing owners to fill into Lake Michigan which have not been acted upon by the holder. Following the amendment of 1973 placing discretion in the Natural Resources Commission to issue such a permit, we are informed that a Commission policy decision of moratorium has been in force.

I.C. 4-18-13-1 makes no provision for a determination of the affect of the landfill operation upon the public interest. The reclamation of the bed of Lake Michigan for private use may dimish the public rights of navigation and fishery in the area to be filled. Fill operations may have an impact on shoreline erosion, the pattern of Lake Michigan currents, and fish feeding and breeding, all of which are problems which accutely affect the Indiana coastline.

There appear to be no Indiana decisions which have considered, in any manner, I.C. 4-18-13-1, et seq. If one concludes that the Public Trust Doctrine, although dormant,

is applicable to the navigable waters of the State of Indiana including Lake Michigan, what affect does this doctrine have upon these landfill statutes.

In the statutes, there appears to be an absence of a positive requirement to inquire into the impact of the riparian's proposed fill in Lake Michigan upon the public interest. It may be argued that the statute explicitly calls for the "approval of the governor of the state", and the approval by the Chief Executive of the State may be deemed tanamount to an implied determination by him that the transfer is in the public interest. If the public interest must be considered and protected in any such authority to fill in Lake Michigan, does the Indiana citizen and taxpayer have standing to question the issuance of the permit? If a public trust doctrine is a viable concept for the State of Indiana, the Paepcke decision, supra, in Illinois which gives standing to citizens and taxpayers appears to loom as a persuasive precedent.

Two additional comments should be made in this discussion concerning disposition to riparians of the public trust lands, which appears to be authorized under I.C. 4-18-13-1, et seq. These permits were issued under a statute enacted in 1907, in a time frame following which was dominated by concerns for vigorous economic development. At that time, such concerns may have been viewed as necessary and desirable

in serving the "public interest". Recent years have witnessed our increased concern for the protection of our environment, and concern for our ecosystem and ecological balance. If the factors considered by the Wisconsin courts for disposition of public trust lands is adopted in our state, industrial, manufacturing and commercial uses for proposed filled land may not be readily acceptable.

Secondly, we are informed that some permits to fill in Lake Michigan may be outstanding and have not been acted upon by the holder. Under the Illinois Central R.R. v. Illinois decision, supra, the legislative body revoked its prior authority granted to the railroad. Whether such unfulfilled permits may now be recalled or revoked will present interesting questions of law if such matters reach the courts. Nevertheless, such fill permits may have otherwise lost their legal viability by reason of the fast moving entry of federal and state governments into the control of fill into navigable lakes and streams under recent water pollution control legislation.

8. The Public Trust Doctrine - A Final Thought:

We disagree with other commentators who suggest that the State of Indiana has rejected the Public Trust Doctrine. We believe that the State acquired these navigable waters with a public trust impressed upon such waters. The most striking fact is that apparently no case or controversy

has arisen in our Indiana courts which would cause the judiciary to face such a decision.

It is our opinion that the Public Trust Doctrine in Indiana, like the genie of old, will soon be released from its enclosure and spring forth to speak to the interest of the public in these natural resources of the State.

B. INDIANA LEGISLATION AND RELATED MATERIALS:

what is effect of legis. policy statements in law of Ind?

1. Policy Statements on Natural Resources:

The general welfare of the people of the State requires that the surface water resources be put to beneficial uses to the fullest extent, and that public and private funds shall be invested to promote and expand beneficial uses of surface waters for the best interests and welfare of the people of the State. I.C. 13-2-1-1, Acts 1955.

Water in any natural stream, lake or other body in the State which may be applied to any beneficial and useful purpose is hereby declared to be a natural resource, subject to control and regulations by the General Assembly. I.C. 13-2-1-2, Acts 1955.

The public policy of this State, in the interest of the economy, health and welfare of the State and its citizens, is to conserve and protect the ground water resources of the State, and for that purpose provide reasonable regulations for its most beneficial use and disposition. I.C. 13-2-2-2, Acts 1951.

The natural resources and the natural scenic beauty of Indiana are declared to be a public right, and the public of Indiana is hereby declared to have a vested right in the preservation, protection and enjoyment of all the public fresh water lakes, in their present state, and the use of such waters for recreational purposes. I.C. 13-2-14-1, Acts 1947. By definition under this statute, public fresh water lakes do not include Lake Michigan or lakes within Lake County, Indiana. I.C. 13-2-14-2, Acts 1947, amended by Acts 1961 and Acts 1963.

This statute has been interpreted to apply to natural and man-made channels connected to public fresh water lakes. 1961 OAG no. 22, p. 101.

It is the public policy of this state that a natural, scenic and recreational river system be established and maintained, and such area be designated, acquired and preserved by the state for the common benefit of the present and future generations. I.C. 13-2-26-2, Acts 1971.

The General Assembly, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, declares that it is the continuing policy of the State of Indiana, in cooperation with other governmental units and other organizations, to use all practical means to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic and other requirements of present and future generations of Indiana citizens. I.C. 13-1-10-2, Acts of 1972 amending I.C. 1971.

Environmental management is to provide for evolving policies for comprehensive environmental development and control on a statewide basis to unify, coordinate and implement programs to provide for the most beneficial use of the resources of the state and to preserve, protect and enhance the quality of the environment so that, to the extent possible, future generations will be ensured clean air, clean water, and a healthful environment. I.C. 13-7-1-1, I.C. 1971 as added by Acts of 1972.

2. Authority and Powers:

(a) Power to Declare Watercourse Navigable:

Under I.C. 13-2-4-1 the boards of commissioners in the several counties are authorized to declare any stream or watercourse in their respective counties navigable, on the petition of 24 freeholders residing in the vicinity of the stream intended to be so declared. A judicial determination as to whether the stream was "navigable" or "non-navigable" prior to the action of the county commissioners is probably a necessity to determine if property rights of riparians are taken or threatened to be taken by the action of declaration of navigability. See: Depew v. Board of Trustees of Wabash & Erie Canal, 5 Ind. 8 (1854). The county commissioners have the power to remove obstructions and to fund for the same purpose. I.C. 13-2-4-3 and 8.

(b) Authority over State Owned Lands Bordering on Lakes and Streams:

Lands owned by the State of Indiana which border or lie adjacent to any lake or stream, and are not otherwise used or occupied, should be under the management and control of the Department of Natural Resources. The State reserves the right to sell, transfer and convey the rights-of-way through such lands for railroads, pipes, gas, water and sewer lines, and certain other public utilities. I.C. 14-3-10-1, Acts 1927.

1936 Opinion of the Attorney General stated that the statute repealed by implication all former acts authorizing the sale of state meanderlands by the Auditor of the State of Indiana. 1936 O.A.G., p. 88.

(c) Powers of the Department of Natural Resources Relating to Land and Waters- General:

Among the powers of the Department of Natural Resources relating to land and waters of special interest to the Coastal Zone Management Program are the care and control of several preserves and parks owned by the state; the power to purchase lands for parks or preserves and scenic places, subject to the approval of the Governor; to investigate lakes and streams and springs of the State for the purpose of protecting them against impurities or pollution; to have general charge and supervision of the navigable waters of the State; the power to issue permits to take coal, sand, gravel and other minerals or substances from or under the bed of any navigable waters. I.C. 14-3-1-14.

power to acquire less than fee simple interests?

Among the powers of the Department of Natural Resources relating to engineering is the power to ascertain, designate and define natural drainage and reclamation areas, and to recommend and secure the enforcement of laws for the drainage and reclamation of swamp, overflowed and nonarable lands of the State. I.C. 14-3-1-15.

The Department of Natural Resources has limited powers to control the use of ground waters of the State through the designation of restricted use areas, where the withdrawal of ground waters exceeds or threatens to exceed its natural replenishment. I.C. 13-2-2-3, Acts of 1951.

The Department of Natural Resources is authorized to conduct the investigation and measurement of the water resources of the State. I.C. 13-2-8-1, Acts 1943.

The Department of Natural Resources is authorized to acquire lands or interests in land for reservoirs for storage of water and to fund the construction of necessary structures for impounding such waters. I.C. 13-2-9-1, et seq., Acts 1963.

(d) Authority of Department of Natural Resources - Party to All Legal Actions:

The Department of Natural Resources is authorized and empowered to become a party, either plaintiff or defendant, to any cause of action now pending in any court of the state

or which may hereafter be brought or commenced in any other courts of the State affecting the preservation or maintenance of the lakes, rivers and streams in the State of Indiana. Meandered and unmeandered lakes and navigable and non-navigable rivers and streams are included in the act. In the interests of public health and convenience, the Department is declared to be a party in interest in all matters affecting lakes and rivers. I.C. 13-2-12-1, et seq., Acts 1947.

(e) Authority of Department of Natural Resources - Flood and Surface Waters:

The Natural Resources Commission may authorize the diversion of flood waters of any watercourse for any useful purpose, including storage. The Commission, if requested, shall mediate disputes between users of surface water in any watershed area. Any user of ground water or surface water shall report to the Commission the volume used in any specific period. I.C. 13-2-1-6.

(f) Department of Natural Resources - Power to Sell Water:

The Natural Resources Commission is authorized to contract to provide certain minimum quantities of stream flow or to sell water on a unit pricing basis for water supply purposes from the storage in reservoir impoundments financed by the State of Indiana. Such contract shall be subject to the approval of the Attorney General and the Governor. I.C. 13-2-1-7, Acts 1955 as added by Acts 1963; cf. I.C. 19-3-20-1, et seq., Acts 1945.

(g) Department of Natural Resources - Authority to Establish Average Normal Water Level:

The Department of Natural Resources is authorized to establish, by legal action, the average normal water level or area of all natural artificial lakes of the State, and to construct or sponsor the construction of dams, spillways and control works necessary to maintain the average normal lake level. I.C. 13-2-13-1, Acts 1947, as amended by Acts 1957.

(h) Public Highway Department - Drains and Watercourses Affecting Highways:

The governing bodies or agencies of the State charged with the duty of construction, maintenance and repair of public highways shall have the power to change the course of any stream, watercourse or drainage ditch, or to restore

it to its original or former channel and may do such work as is necessary to protect the banks or slopes to prevent wash or erosion in the event the waters of any stream, watercourse or ditch are causing or threatening injury, damage to or destruction of any public highway or bridge. In the event that any of the proposed work shall conflict or interfere with the jurisdiction of a federal agency over a navigable stream, the consent of the federal agency shall first be obtained. I.C. 13-2-25-1, et seq., Acts 1945.

(i) Authority of Governmental Unit to Purchase State Land Bordering on Lakes and Streams:

Any incorporated town, city township or county having the power to own and maintain a public park or forest has the power, with others, to purchase swamp, saline, and meanderlands owned by State and bordering on lakes and streams for public park and forest purposes. I.C. 4-18-2-1 et seq., Acts 1929.

(j) Department of Natural Resources - Authority to Develop Comprehensive Plan:

The State of Indiana assented to a 1964 Act of Congress establishing a land and water conservation fund to assist the states in meeting present and future outdoor recreation demands. 16 U.S.C. §4601-4 et seq.

The Department of Natural Resources is authorized to prepare and maintain a comprehensive plan for the development of the outdoor recreational resources of the State. It may enter into and administer contracts and other agreements with the United States or its agencies for the planning and acquisition of development projects involving participating federal aid funds on behalf of any state, county, city or other governmental unit. The Department must act in compliance with the federal act and the rules and regulations set forth by the United States Secretary of the Interior. I.C. 14-3-5-1, Acts 1965.

(k) Department of Natural Resources - Control Over Potable Water:

The Department of Natural Resources is authorized to require owners of flowing waterwells to reduce the flow to prevent the waste or loss of potable water which is not being put to a beneficial use. The Department must first issue a permit before potable ground water may be injected or pumped into underground formations which contain non-potable water. A penalty is provided for the violation of this act. I.C. 13-2-3-1, et seq., Acts 1957.

(l) Department of Natural Resources - Fishing Areas in Indiana Port:

The Department of Natural Resources shall have the power to establish and maintain within all ports of the Indiana Port Commission in operation on July 1, 1975, areas for the use of the citizens of the State for public fishing from shore, together with the right, subsequently, to limit or halt public fishing in the area if the site is leased to others. I.C. 8-10-1-7.5, I.C. 1971, as added by Acts 1975.

(m) Department of Natural Resources - Flood Plain Commission Power

It is declared unlawful to erect, use or maintain in or on any flood plain, a permanent abode or place of residence; or to place any structure or obstruction or cause any excavation which will adversely affect the efficiency or restrict the capacity of the floodway so as to constitute an unreasonable hazard to the safety of life or property or result in unreasonably detrimental affects upon fish, wildlife and botanical resources, all of which constitutes public nuisances. The Flood Plain Commission, a division of the Department of Natural Resources, has the power to begin and prosecute any action to enjoin or abate such a nuisance. The Commission shall have the power to remove or eliminate any structure, obstruction, deposit or excavation in the floodway which is in violation, and the power of eminent domain may be used to accomplish the purposes of the act. I.C. 13-2-22-13, Acts 1945, amended by Acts 1961, 1973 and 1976.

wet lands protection ?

(n) Department of Natural Resources - Channels in Streams and Rivers:

The General Assembly finding that the unregulated construction of channels may be injurious to the public health, safety and welfare, and that construction of channels should be regulated, no person shall construct a channel before receiving the written approval of the Natural Resources Commission prior to any construction. A channel means, under the Act, either an artificial channel or the improved channel of a natural watercourse connecting to any river or stream in the State for the purpose of providing access by boat or otherwise to public or private industrial, commercial, housing, recreational or other facilities. Before granting approval, the applicant shall receive approval of the State Board of Health or the Stream Pollution Control Board, and in the case of a channel connecting to a navigable river or stream, shall dedicate any and all waters so created within the connection to the general public use. I.C. 13-2-18.5-1, et seq.; I.C. 1971 as added by Acts 1971.

(o) Authority for Water Resources Research:

The Water Resources Research Act of 1965 was created to authorize the Indiana Environmental Mangement Board, the Department of Natural Resources and the Bureau of Water and Mineral Resources to conduct applied research in their respective areas for the purpose of securing the scientific and technical data and information necessary for the solution of problems involving the wise beneficial development, use and management of the water resources of Indiana. These agencies are to report to the Water Resources Study Committee and may conduct their research indepently or with other agencies of the State or with federal agencies. I.C. 15-2-7-1 et seq., Acts 1965.

(p) Power of City and Towns Over Watercourses and their Banks:

Standards for such actions?

Every city and town, except when otherwise provided by law, shall have exclusive power over watercourses, drains, bridges and public grounds within the city or town, and may prescribe the height, width and manner of construction of all bridges. Every city or town may also drain or fill up ponds or low grounds, straighten and deepen streams, and establish the lines and limits of the banks thereof, and may provide for the improvement of the banks, and establish the lines and limits of the shores of lakes, and provide for the drainage and filling up thereof. I.C. 18-5-10-4, Acts of 1969. This power should be understood in terms of the paramount power of the federal government to control these same matters for navigation and commerce purposes as well as the power of the State to do likewise.

3. Regulatory Legislation:

(a) Prohibition on Unlawful Disposal of Refuse:

It shall be unlawful for any person to put, throw, dump or leave refuse on any public highway within any state park or recreation area, or immediately adjacent to any lake or stream, except in proper containers provided for sanitary storage of such refuse, or except as part of a landfill operation otherwise permitted by law to reclaim submerged land in Lake Michigan or other waters, or except as a part of a waste discharge approved or covered by a pollution abatement program approved by the State. Refuse is defined as well as person, and the latter includes units of government. The throwing, discarding, dumping or other disposition of refuse from any moving vehicle, or boat, other than a public conveyance, or from any such vehicle or boat while temporarily stationary, in violation of this act shall be prima facia evidence of a violation by the operator of the conveyance.

I.C. 13-3-11-1 et seq., Acts 1969, I.C. 1971 as added by Acts 1971.

(b) Prohibition Against Corporation Obstructing Navigable Stream:

A corporation may be prosecuted for erecting, continuing or maintaining a public nuisance or for obstructing a public highway or navigable stream. I.C. 35-1-48-1, Acts 1905, as amended by Acts 1974.

This statute is repealed effective July 1, 1977, but its import is replaced through I.C. 35-41-1-2 which hereafter defines the word person to include a corporation.

(c) Prohibition Against Person Obstructing Any Stream or Watercourse:

Any person obstructing any stream or watercourse declared navigable by county commissioners shall be liable to the same pains and penalties as persons guilty of obstructing public highways. I.C. 15-2-4-4, Acts 1905.

(d) Prohibition of Construction of Channel Without Authorization:

Any person who violates the provisions of I.C. 13-2-18.5-1 providing for application to and approval by Natural Resources Commission before constructing any artificial channel or improving any channel of a natural watercourse shall upon conviction be guilty of a misdemeanor, be subject to substantial fine and each day of continuing violations after conviction shall be considered a separate offense.

(e) Prohibition Against Certain Ditches and Drains:

It is unlawful for any person to locate, dig or dredge or establish or construct any ditch or drain cutting into or through, or upon the line of any fresh water lake in the State or to locate, dig, dredge or in any way construct any ditch or drain having a bottom depth lower than the level of the lake as established by law within 160 rods of any point on the line of such lake unless a dam shall have been provided for and constructed so as to adequately protect the water level.

It shall be unlawful for any person to cut into or around or interfere with or change or destroy any dam, bank or levy already constructed or which may hereafter be constructed for the purpose of maintaining the level of the waters of such lake at their established level or to do

the same with respect to the banks or shores of any such lake or any part thereof in such a way as to lower or tend to lower the waters thereof.

It shall be unlawful for any person to interfere with, change, or alter any bank, dam, spillway or outlet of any fresh water lake in the State, or to dig or dredge or in any way lower any outlet to any such lake at any point within 240 rods of such lake.

The violation of any of the foregoing provisions shall be deemed a misdemeanor, and upon conviction a fine or imprisonment, or both. I.C. 13-2-17-1 et seq., Acts 1905.

(f) Crimes Against Property - General:

The crime of trespass, for entry after permission is refused or neglect or refusal to depart, and the crime of malicious trespass for the malicious or mischeivious injury of property of another or any public property are subject to fine or imprisonment or both. I.C. 35-1-64-1, Acts 1905 as amended; I.C. 35-1-66-1, Acts 1905 as amended.

Any person who wrongfully obstructs any public highway, canal, bridge, embankment or lock, or injures any material used in the construction thereof, shall, on conviction, be fined or jailed, or both.

Both the trespass and malicious trespass sections are repealed effective July 1, 1977, at which time the same acts shall constitute violations of I.C. 35-43-2-2 under the revised penal code.

Every person who shall erect or continue or maintain any public nuisance, to the injury of any part of the citizens of the State shall, on conviction, be fined. I.C. 35-1-102-1, Acts 1905. Whoever without authority of law builds, erects or keeps up any dam or other obstruction to any stream of water, and thereby produces stagnent water which is injurious to the public health or safety, shall, on conviction, be fined. I.C. 35-1-102-3, Acts of 1905. In addition, civil remedies for abatement of nuisances are provided. I.C. 34-1-52-1 et seq.

VII

SPECIFIC AREAS OF PUBLIC CONCERN

A. FLOOD CONTROL AND PREVENTION:

1. Federal Flood Control Act:

Over the past 50 years, the Congress has enacted legislation to control and prevent flooding, and to alleviate the loss and devastation resulting from it. It has attacked the problems directly by authorizing the construction of flood projects and flood plain projects. More recently, it has attacked the problem indirectly by making available insurance and loan guarantees to individual property owners only if local governments have adopted federally recommended land use and control measures which are intended to limit the risk of flood damage.

In the general flood control act of the Congress, 33 U.S.C. 701 - 701u, the Congress has declared its recognition that destructive floods upon the rivers of the United States upset orderly process and cause loss of life and property, erosion of lands and impairment of navigation, highways and other channels of commerce, and therefore constitute a menace to national welfare. The Congress stated that flood control on navigable waters or their tributaries is a proper activity of the federal government in cooperation with states, their political subdivisions and localities; that the federal

government should improve or participate in the improvement of navigable waters or their tributaries, including the watersheds thereof, for flood control purposes where the benefits to whomever they may accrue are in excess of the estimated costs, and if lives and the security of the people are otherwise adversely affected. 33 U.S.C. §701a.

The words "flood control" are intended to include channel and major drainage improvements. The federal investigations and improvements of rivers and other waterways for flood control and allied purposes was placed under the direction of the Secretary of the Army and the supervision of the Chief of the Corps of Engineers. Federal investigations of watersheds and measures for run-off, waterflow retardation and soil erosion prevention on watersheds was placed under the direction of the Secretary of Agriculture.

The Secretary of the Army, on behalf of the United States, was authorized to acquire title to land, easements and rights-of-way necessary for any dam, reservoir project or channel improvement project.

The Act authorized an emergency fund for flood emergency preparation, in flood fighting and rescue operations, or in the repair and restoration of any flood control work threatened or destroyed by flood.

The state and local political subdivisions had important and necessary roles to play. No money was to be expended for

projects until the state, political subdivision, and other resposible local agencies have given assurances satisfactory to the Secretary of the Army that:

(a) They will provide, without cost to the United States, all lands, easements and rights-of-way for the construction of the project (with some exceptions);

(b) They will save and hold the United States free from damages on account of the construction of the project; and

(c) They will maintain and operate all the completed projects in accordance with regulations prescribed by the Secretary of the Army.

The Act further provided for partial reimbursement to the state and local bodies for certain excess costs in acquiring the land rights. Alternatively, the Act allows a state or local bodies, at their election, to pay the Secretary his estimate of the costs chargeable to the state to acquire the land rights, and the Secretary will then acquire them. These costs and obligations of a state will not apply in those cases in which the Secretary estimates that 75% or more of the benefits of the project will accrue to lands and property outside the state in which the project is located.

The Act authorized several forms of non-structural flood control. In the design of plans by any federal agency for projects involving flood protection, consideration was to be given to non-structural alternatives to prevent or reduce flood damages including, non-exclusively:

(a) Flood proofing of structures;

(b) Flood plain regulations;

(c) Acquisition of flood plain (for recreational, fish and wildlife and other public purposes); and

(d) Relocation.

With a view toward formulating the most economically, socially, and environmentally acceptable means of reducing or preventing flood damages.

The Act thus gives legislative approval to a "cost - benefit" application to flood control projects. If the costs levees or flood walls can be substantially reduced by the evacuation of a portion or all of the area proposed to be protected, the Chief of the Corps of Engineers may modify the plan to eliminate that portion of the project:

> "Provided, that a sum not substantially exceeding the amount thus saved in construction cost may be expended . . . toward the evacuation of the locality eliminated from protection and the rehabilitation of the persons so evacuated:" 33 U.S.C. §701i

The Act prescribes that where a non-structural alternative is recommended, non-federal participation shall be comparable to the value of lands, easements and rights-of-way which would have been required of the non-federal interest for structural protection measures.

2. National Flood Insurance Program:

In 1968, the Congress created a national flood insurance program. 42 U.S.C.§4001 - 4127.

The Congress found that flood disasters have created personal hardships and economic distress, and have placed an increasing burden on the nation's resources. It further found that preventive and protective works to reduce loss were not sufficient to protect against the growing exposure to future flood losses, and that it was uneconomic for the private insurance industry alone to make flood insurance available. Therefore, the Congress declared its purpose (i) to authorize a flood insurance program by means of which flood insurance can be made available on a nationwide basis through the cooperative efforts of the federal government and the private insurance industry, and (ii) to encourage state and local government to make appropriate land use adjustments to constrict the development of land which is exposed to flood damage and to minimize damage caused by flood losses.

The Secretary of Housing and Urban Development was authorized to establish and carry out the program which would enable interested persons to purchase insurance against loss resulting from physical damage to or loss of real property or personal property arising from any flood occurring in the United States. The Secretary was to give priority in the available insurance to residential properties, church properties and small business concerns.

The Flood Disaster Protection Act of 1973 made significant amendments to the program. 42 U.S.C. §4001g,

§4002 and others. The Congress found that annual losses throughout the nation from floods and mud slides were increasing, largely as a result of the accelerating development of, and concentration of population in, areas of flood and mudslide hazards. The 1973 Act had as its purposes, (1) to substantially increase the limits of the coverage authorized under the National Flood Insurance Program, (2) to provide for the dissemination of information concerning flood prone areas, (3) to require states and local communities, as a condition of future federal financial assistance, to participate in the program and to adopt adequate flood plain ordinances with effective enforcement provisions to reduce or avoid future flood losses, and (4) to require the purchase of flood insurance by property owners who are being assisted by federal programs or federally regulated or insured agencies or institutions in the acquisition or improvement of their land or facilities.

Since development of these flood prone areas was made possible by the availability of mortgage loans through federally insured savings and loans, banks and other financial institutions, the Congress devised a plan, on a graduated basis, whereby no insured financial institution could grant, on or after July 1, 1975, a loan secured by improved real estate or a mobile home located or to be located in an area that had been identified by the Secretary of HUD as an area having

special flood hazards, unless the community in which such area is located war participating in the National Flood Insurance Program.

In order for the local community to participate in the program, it had to adopt land use and control measures consistent with criteria prescribed by the Secretary of HUD to reduce or avoid flood damage in connection with future construction within the areas of the flood plain. The program did not require any flood proofing or other structural alterations of buildings retroactively, but it did require certain measures to be taken with respect to new construction. The technique used by the Congress in compelling local communities to stop development within flood plain areas has been effective. The Congress provided that its insured financial institutions shall require national flood insurance in connection with the financing or the acquisition of a building in a designated flood plain area. The Congress then provides that national flood insurance will not be available unless the state and local communities enact ordinances and other legislation restricting development or uncontrolled development within a flood plain area. The result is that states and local communities are compelled to enact the restricted land use and flood control measures deemed necessary by the Congress to reduce tragic and catastrophic loss to property from future flood, mud slide and shoreline erosion damage.

3. Water Resources Planning Act:

The Secretary of the Army, acting through the Chief of Engineers, was authorized to construct, operate and maintain any water resource development project, including single and multiple purpose projects involving but not limited to, flood control, navigation and shore protection. Any appropriation must first be approved the Senate and House Committees on Public Works.

Under the National Stream, Bank, Erosion Prevention and Control Act of 1974, the Secretary of the Army, acting through the Chief of Engineers, was authorized and directed to conduct a national stream bank erosion prevention and control demonstration program to evaluate the extent of stream bank erosion, to develop new methods and techniques for bank protection, to conduct reserach on soil stability and identification of causes of erosion, and to make a report to the Congress on the results of the studies. 42 U.S.C.A. §1962-5 (note).

The Act provides that the Secretary of the Army, acting through the Chief of Engineers, when he determines it to be in the public interests, may enter into agreements providing for reimbursement to the states or political subdivisions thereof for work to be performed on water resources development projects authorized for construction by the Secretary.

4. State Legislation Concerning Flood Control:

Various Acts of the General Assembly of the State of

Indiana have been adopted to further flood control and prevention within the state.

In 1969, concerned about the unregulated flow of rivers and waters of the State which result in periods of destructive floods, the State Legislature created the Reservoir Coordinating Committee of Indiana, within the Department of Natural Resources, for the purpose of establishing adequate coordination of efforts of various state and federal agencies in the planning and development of the state system of reservoirs. I.C. 13-2-10-1, et seq., Acts 1969.

The Committee has the duty of coordinating the planning and development of reservoirs in the state for the purpose of flood control, water supply, water quality control, recreation and related water resources purposes. The Committee has the obligation to cooperate with the United States or any agency thereof, or any political subdivision of the State.

Under I.C. 13-2-11-1, et seq., Acts 1947, the State of Indiana vested itself with full power and control over all of the public fresh water lakes in the State, excepting therefrom Lake Michigan and any lake within Lake County, Indiana. The Act made it unlawful for any person to extend the shoreline either by excavating or by filling, without prior approval of the Department of Natural Resources. The Act gave to the Department of Natural Resources authority

and power to enforce the provisions thereof by court action. Under I.C. 13-2-18.5-5, I.C. 1971 as added by Acts of 1971, no person may construct a channel connecting to any river or stream without first receiving the written approval of the Department of Natural Resources.

The Conservancy District Act of 1957 authorized the establishment of conservancy districts for several purposes including providing water supplies, flood prevention and control, prevention of loss of topsoil from injurious water erosion, and storage of water for augmentation of stream flow. Freeholders who desired to establish a district initiate proceedings by filing a petition. Following such a filing in a court of competent jurisdiction, various statutory pre-requisites and requirements have to be complied with in order to ultimately conclude with the establishment of the district.

The powers of the conservancy district included the construction or maintenance of levees within the district. The governing board was required to establish a district plan and to establish revenues including receipts from assessments for benefits, for maintenance and operation, and receipts from the sale of services or property or from the federal or state government. The district has the power of eminent domain. I.C. 19-3-2-1 through 106, Acts 1957, as amended.

Any levee district or levee association which existed

prior to the Conservancy District Act of 1957 and any levee district established thereafter, had the right to accept and enjoy all the benefits of the Conservancy District Act upon taking certain statutory steps to accomplish the same. I.C. 19-3-2-91.

An Act of 1961 by the Indiana Legislature first placed a statutory obligation upon the owner of any dam, levee, dike or floodwall to maintain and keep the structures in a state of repair or operating condition required by the exercise of prudence, due regard for life or property, and the application of sound and accepted engineering principles. I.C. 13-2-20-2, Acts 1961.

The Natural Resources Commission, on behalf of the State of Indiana, was given jurisdiction and supervision over the maintenance and repair of dams, levees, dikes and floodwalls along the rivers, streams and lakes of the State, and were required to exercise care to see that such structures are maintained in good and sufficient state of repair or operating condition. The Natural Resources Commission was authorized and directed to make engineering inspections not less than once each calendar year, and if the Commission finds any structure not sufficiently strong, or not maintained in good and sufficient state of repair or operating condition, or unsafe and dangerous to life or property, shall issue an order directing the owner to take remedial action. If

a condition was so dangerous that emergency measures were required, the Act gave such authority to the Commission to provide the emergency protection, and to recover the cost from the owner by appropriate legal action. Notwithstanding the direction by the Act to the National Resources Commission to make inspections and to cause owners to comply, the Act exculpated the Commission from any liability for damages caused by or arising out of the construction, maintenance, operation or failure of any dam, levee, dike or floodwall or by the issuance and enforcement of any order.

5. Indiana Flood Control Act of 1945, as Amended:

The Flood Control Act was adopted in Indiana in 1945 upon a declaration by the Legislature that the loss of lives and property caused by floods, and the damage resulting therefrom was of deep concern to the State, affecting the life, health and convenience of the people in the protection of property. The Act was designed to prevent and limit floods and to regulate the alteration of rivers and streams in accordance with sound and accepted engineering practices so as to control and minimize the extent of floods. I.C. 13-2-22-1 et seq., Acts 1945.

The Natural Resources Commission was given jurisdiction over the public and private waters in the state and lands adjacent thereto necessary for flood control purposes and for the prevention of flood damage. The Commission was charged with the responsibility of preparing a comprehensive study

and investigation in the areas affected by floods and to determine the best method and manner of establishing flood control giving consideration to the reservoir method, the channel improvement method, the levee method, the flood plain regulation method and any other practical method. The Commission was authorized to perform its duties in cooperation with any person or agency of the State, with other states, or with the United States or any agency thereof. The Natural Resources Commission was given the power of eminent domain to carry out its purposes. The Commission was given the power to establish a floodway to give prior approval to all flood control works and to report to the Governor from time to time.

Under a Flood Plain Management Act, the Natural Resources Commission was authorized and directed to develop and promulgate rules and regulations for the deliniation and regulation of all flood hazard areas within the State. The Commission was authorized to provide technical data and information to local units of government and to cooperate with all other governmental units. The Act provided that a local unit shall not issue a permit for any structure, obstruction, deposit or excavation within any flood hazard area or portion thereof which lies within a floodway without the prior written approval of the Commission. I.C. 13-2-22.5-2, I.C. 1971 as added by Acts of 1973.

In 1959, the Legislature provided a flood control

revolving fund from which the Natural Resources Commission was authorized to make loans to any municipality for the purpose of instituting, accomplishing and administering any approved flood control program. The Act provided for priorities in making the loan, for conditions to be met before the loan was granted, and for the method by which the loan would be repaid to the State.

Other acts of the State Legislature dealt somewhat with the problem of flood control. The Soil and Water Conservation District Act of 1965, I.C. 13-3-1-1 et seq., Acts 1965, declared it to be the policy of the General Assembly to provide for the conservation of the soil and water resources of the State, for the control and prevention of soil erosion, for the prevention of floodwater and sediment damage, for other matters of conservation to control floods, prevent impairment of dams and reservoirs, and to assist in maintaining the navigability of rivers and harbors. A State Soil and Water Conservation Committee was established to serve as an agency of the State and to perform the functions of the Act. The method for establishing a soil and water conservation district was set forth, together with its powers and duties. The Department of Natural Resources was authorized and directed to expand the small watershed planning program carried on with the United States Department of Agriculture. I.C. 13-4-3-9, Acts 1969. I.C. 19-4-17-1 et seq., Acts

1915 provide for levee improvements in the cities of the second through the fifth classes, and towns. I.C. 19-4-18-1 et seq. Acts 1939, as amended, provides for certain flood control districts in cities of the second through the fifth classes and, in I.C. 19-4-19-1 et seq., Acts 1953, provided for emergency bonding authority to match federal funding in flood control districts. In 1965, I.C. 19-4-20-1 was enacted to permit any city of the second through the fifth class, and a town, to order the construction or change of the levee, the change or improvement of a water course, or the drainage of a section of ground, or the construction of a sewer or drain necessary for the public welfare, and to provide for the assessment of benefits on those properties improved by the completion of the work.

B. EROSION CONTROL:

The control and provisions for flooding have a direct effect upon the control of erosion. The powers and duties of the federal Departments of the Army, the Interior and Agriculture, and the State of Indiana agencies, including the Department of Natural Resources, outlined in the foregoing material apply to a greater or lesser extent to this section on erosion control.

There are some specific federal and state laws relating to control of erosion.

1. Federal Legislation Concerning Erosion Control:

The Secretary of Agriculture is authorized and directed

to develop a program of land conservation and land utilization in order to correct maladjustments of land use, and thus assist in controlling soil erosion as well as mitigating floods protecting the watersheds in navigable streams and other purposes involving the health, safety and welfare of people. 7 U.S.C. §1010. The Secretary is also directed to carry out a land inventory and monitoring program to include studies and surveys of erosion and sediment damages. 7 U.S.C. §1010a.

The Secretary of Agriculture is granted numerous powers to effectuate the programs provided for in §1010 of the Act. 7 U.S.C. §1011.

33 U.S.C. 426 et seq., authorized and directed the Chief of Engineers, under the Secretary of the Army, to make investigations and studies in cooperation with other agencies of affected states with a view toward devising effective means of preventing erosion of the shores of coastal and lake waters by waves and currents. This Act establishes, under the Chief of Engineers, a Coastal Engineering Research Center conducted by a Board on Coastal Engineering Research who have been selected with regard to their special fitness in the field of beach erosion and shore protection. 33 U.S.C. §426-1, -2.

It is the declared purpose of the Act to prevent damage to the shores of the United States and to assist in the construction, but not the maintenance, of works for the restoration

of and protection against erosion by waves and currents. It further provides that the federal contribution in any project shall not exceed one-half of the cost of the project. The remainder shall be paid by the state or other political subdivision in which the project is located. Costs allocated to the restoration and protection of federal property shall be borne fully by the federal government. Under certain criteria, the federal participation in the cost of the project for restoration and protection of state, county or other publicly owned shores parks and conservation areas may be up to 70% of the total cost. 33 U.S.C. §426e.

By definition in the Act, when in the opinion of the Chief of Engineers, the most suitable and economical remedial measures would be provided by periodic beach nourishment, the term "construction" may be construed, for the purposes of the Act, to include the deposit of sandfill at suitable intervals of time to furnish sand supply to protect shores for a length of time specified by the Chief of Engineers. Federal contribution to any project requires the prior approval by Congress as well as the approval of the Chief of Engineers and the Coastal Engineering Research Board.

In certain instances, the Secretary of the Army is authorized to reimburse local interests for work done by them. In addition, the Secretary of the Army is authorized to undertake construction of small shore and beach restoration and

protection projects not specifically authorized by Congress where he finds such work is advisable and where such work does not exceed a certain cost for each fiscal year.

The Secretary of the Army, through the Chief of Engineers, is authorized to investigate, study and construct projects for the prevention or mitigation of shore damages attributable to federal navigation works. The cost of installing, operating and maintaining such projects shall be borne entirely by the United States. Such a project may be authorized for the area near Michigan City, Indiana, where shore damage has been attributed to federal harbor structures.

Under the Water Resources Planning Act, 42 U.S.C. §1962 et seq., the Secretary of the Army, acting through the Chief of Engineers, is authorized to construct, operate and maintain any water resource development project including purposes involving navigation, flood control and shore protection. Approval is required by resolution of senate and house committees on public works, and there are dollar limitations. Under the Act, the Secretary of the Army may reimburse the states for certain installation costs, with certain dollar limitations. 42 U.S.C. §1962 a - d.

In March, 1974, the Stream Bank Erosion Control Evaluation and Demonstration Act of 1974 was created by the Congress. The Secretary of the Army, acting through the Chief of Engineers, was authorized and directed to establish and conduct a five year program to evaluate stream bank erosion

on navigable rivers, develop new methods for bank protection, report to the Congress on the results and undertake certain demonstration projects. See: 43 U.S.C.A. §1962d-5 (Note). At the same time the National Shoreline Erosion Control Development and Demonstration Program of 1974 was created. Upon a finding by the Congress of the importance and interest in the coastal zones of the United States on the one hand and the deterioration of the shorelines and the tremendous losses therefrom, the program sought to develop and demonstrate economical means to combat shoreline erosion. Demonstration projects were to be undertaken at various sites, with not less than two sites on the shorelines of the Great Lakes. A shoreline erosion advisory panel was authorized having various powers. Annual reports were required to be submitted to committees of the Congress, and the final report including a comprehensive evaluation of the National Shoreline Erosion and Control Development and Demonstration Program was to be submitted at the end of the five year period.

2. State Legislation:

The Soil and Water Conservation Districts Act of 1965 declared the policy of the legislature that land and water resources of the State must be preserved through the control of soil erosion and flood prevention. I.C. 13-3-1-1, Acts 1965. The Act established a State Soil and Water Conservation Committee, and local conservation districts, with membership, duties and powers as outlined in the Act.

The general explanation of this Act has been discussed under flood control and prevention, above.

Under I.C. 19-4-14-1, Acts 1931, amended by Acts 1965, the board of public works and safety of any city or the board of trustees of any town situated upon or adjoining Lake Michigan, who desire to prevent the washing away of the beach, bank, shore or land abutting it, may construct proper jetties and seawalls, cause the shoreline to be graded, or make improvements in the harbors and watercourses situated upon or adjoining a navigable stream or lake, channel, slip or watercourse.

Under I.C. 19-4-15-1, Acts 1965, the board of public works and safety of any city and the board of trustees of any town was given the power to appropriate or condemn property or rights-of-way to make such improvements of harbors and watercourses as authorized by I.C. 19-4-14-1, above. The materials set forth in the section of flood control and prevention include authority and direction to act for control of erosion as well, and the materials above would apply equally to this section.

C. HARBOR AND WATER RELATED CONSTRUCTION:

1. Federal Legislation:

Federal investigations and improvements of rivers, harbors and other waterways shall be under the jurisdiction of and prosecuted by the Department of the Army under the

direction of its Secretary and the supervision of the Chief of Engineers. 33 U.S.C. §540. A Board of Engineers for Rivers and Harbors was established by the Act within the Corps of Eigineers. The Board shall submit to the Chief of Engineers recommendations as to the desirability of commencing or continuing any river and harbor improvement. In reaching its recommendation, the Board shall consider the amount and character of commerce which will be benefitted by the improvement and the relation of the ultimate costs of such work, both construction and maintenance, to the public commercial interests involved. In addition, it should consider the public necessity for the work and the propriety of its construction continuance or maintenance at the expense of the United States.

Among his various reports to the Congress, the Chief of Engineers shall indicate the character of the terminal and transfer facilities existing on every harbor or waterway under maintenance or improvement by the United States, and state whether they are considered adequate for existing commerce. 33 U.S.C. §550. It has been the declared policy of a Congress that water terminals are essential at all cities and towns located upon harbors or navigable waterways and that at least one public terminal should exist and be regulated by the municipality or other public agency of the state and open to all.

33 U.S.C. §401 through 465 deal generally with the

protection of navigable waters and of harbor and river improvements. 33 U.S.C. §401 provides generally that it shall be unlawful to construct or begin the construction of any bridge, dam, dike or causeway over or in any port, haven, harbor, canal, navigable river or other navigable water of the United States until the consent of Congress to the building thereof has been obtained and further until the plans have been submitted to and approved by the Chief of Engineers and by the Secretary of the Army. §401 also provides that any such structures may be built under authority of the legislature of the state across rivers and other waterways, the navigable portions of which lie wholly within the limits of a single state provided the location and plans thereof are submitted to and approved by the Chief of Engineers and by the Secretary of Army before construction is begun.

In this and other connections relating to bridges and causeways, all functions, powers and duties of the Secretary of the Army and officers of the Department were transferred to and vested in the Secretary of Transportation in 1966 to the extent that they relate generally to the location and clearances of bridges and causeways in navigable waters of the United States. 49 U.S.C.§1655(g)(6).

33 U.S.C. §403 prohibits the creation of any obstruction to a navigable capacity of any of the waters of the United States which has not been authorized by Congress. Likewise, §403 prohibits the building of any wharf, pier,

breakwater, bulkhead, jetty or other structures in any port, harbor, canal or other water of the United States, outside established harbor lines, or where harbor lines have been established, except on plan recommended by the Chief of Engineers and authorized by the Secretary of the Army. Sections 407, 408 and 409 generally prohibit depositing of materials in navigable waters and placing other obstructions therein.

The Bridge Act of 1906 directed that no bridge should be constructed or maintained across or over any navigable waters of the United States until the plans and specifications for its construction, and drawings for its proposed location were submitted to the Secretary of the Army and Chief of Engineers for their approval. 33 U.S.C. §491, et seq. Since 1966, matters relating generally to the location and clearance of bridges and causeways have been transferred and vested in the Secretary of Transportation and now require his approval in addition to all other approvals.

No bridge erected or maintained under the Bridge Act of 1906 shall unreasonably obstruct the free navigation of the waters over which it is constructed. If any bridge so erected, shall, in the opinion of the Secretary of Transportation, at any time unreasonably obstruct navigation, the Secretary, after giving interested parties notice and opportunity to be heard, shall notify the persons owning the bridge to alter it so as to render navigation through, under

it reasonably free, easy and unobstructed. 33 U.S.C. §494. Any person who fails to comply with the orders of the Secretary of the Army, or of Transportion, or the Chief of Engineers, shall be deemed guilty of a misdemeanor and upon conviction be subject to a fine. 33 U.S.C. §495.

The Bridge Act of 1940 generally related to the alteration of bridges. 33 U.S.C. §511 - 523. This Act provides that no bridge shall at any time unreasonably obstruct the free navigation of any navigable waters of the United States. It provides for notice, hearings and findings concerning whether an alteration of a bridge is required and if so, what alterations are needed. Section 522 of the Act, in recognition that this Act is substantially the same as the Bridge Act of 1906, and particularly §494 thereof, provides that §494 shall not be applicable with respect to any bridge to which the provisions of §511 to 523, are applicable, except as otherwise provided in the section.

Beginning with 33 U.S.C. §577, and following, the Congress has provided for small river and harbor improvement projects which will result in substantial benefits to navigation and which can be operated consistently with appropriate and economic use of the waters of the nation for other purposes, provided that in the opinion of the Chief of Engineers such work is advisable and benefits are in excess of cost. Each project provided for shall be complete in itself and not commit the United States to any additional improvement

to insure its successful operation. Non-federal interests are required to share in the costs of the project to the extent that the Chief of the Engineers deems it appropriate to the local nature and its benefits. As in several other acts, the non-federal local interests must provide all necessary land easements and rights-of-way without cost to the United States, and agree to hold the United States free from damages that may result from the construction and maintenance of the project. Also in connection with this Act, the Corps of Engineers shall submit annually a list of those projects for improvement of rivers and harbors and other waterworks for navigation, beach erosion, flood control and other purposes which have been authorized for a period of at least eight years without any Congressional appropriations within the last eight years and which he determines after review should no longer be authorized. Each project so listed shall be accompanied by a recommendation and the reasons for that recommendation. Prior to such submission, the Corps of Engineers shall seek views of interested federal departments, agencies and instrumentalities and the Governor of the state in which the project would be located and the views of these parties shall accompany the lists submitted to Congress. Local Congressmen should be sent this list and the accompanying views and recommendations. This concept of project review is apparently designed to lead to the deauthorization of those projects not deemed of

sufficiently high priority to continue as viable projects. 33 U.S.C. §579.

2. State Legislation and Related Materials:

Cities and towns of the State of Indiana, for the benefit of the public, in aid of any harbor or harbor project as well as in aid of navigation may widen, straighten and deepen any watercourse, navigable stream or lake for harbor purposes as well as for purposes of navigation. I.C. 19-4-16-1, Acts 1915. No such project may be taken until the consent of the United States Government so to do is first procured in the case of navigable streams and navigable bodies of water controlled by it. Authority is given to said city or town which has acquired property for this purpose, by gift, purchase or condemnation, to turn the same over to the United States Government, it if deems it to be best to do so. I.C. 19-4-16-2. The Act further provides for damages to any riparian owner whose land is cut off from the straightened stream, canal or navigable river. I.C. 19-4-16-6.

The enabling legislation to establish modern harbor and facilities was enacted in 1961. I.C. 8-10-1-1 et seq., Acts of 1961, as amended. It authorized the Commission to establish a public port on Lake Michigan, and by later amendments authorized the establishment of additional ports on the Ohio River and the Wabash River. In a very lengthy opinion in the case of Orbison v. Welsh, 242 Ind. 385,

179 N.E.2d 727 (1962) the Supreme Court of Indiana upheld the constitutionality and legality of the Indiana Port Commission Act. The Commission was empowered to acquire lands, including lands under water and riparian rights, property, rights-of-way, easements and the like by purchase or by appropriation. The title to the property condemned was to be taken in the name of the State of Indiana. I.C. 8-10-1-11. The powers and duties of the Commission were broad and complete in terms of conducting a major public port business. I.C. 8-10-1-7.

In 1967, the Indiana Port Commission was authorized, alone or with the federal government, to construct a new canal or canals or to improve any existing canal, river or other waterway including but not limited to dredging in a manner to accomodate water borne transportation and the construction of wharves, docks and other facilities for the unloading of barges and other boats. I.C. 8-10-2-1, Acts 1967.

In 1959, the General Assembly authorized the creation of port authorities by local governments. I.C. 8-10-5-2, Acts 1959, as amended. Municipal corporations, counties or any combinations thereof were authorized to create a port authority, but the Act specifically excluded counties having three or more cities of the second class or any municipal corporation located within any such county - and the only county coming within this provision was Lake

County, Indiana. I.C. 8-10-5-21. This section excepting Lake County from the provisions of the locally created port authority was repealed in 1975 and at the same time direct authority was given to Lake County and its political subdivision to create such a local port if desired.

The Act authorized the creation of a port authority, a board of directors, and granted powers, including the power of eminent domain, the power to issue revenue bonds and to make certain tax levies.

D. DREDGING, FILLING AND EXTRACTION:

The traditional actions of dredging, filling and extraction were controlled by federal and state authorities in order to avoid obstructions or impediments to navigation. In recent years, an equal concern of these authorities is the consequence of fill or dredging on the nation's effort to restore and maintain the integrity of its waters. By definition under the Water Pollution Control Amendments Act of 1972, the term "pollutant" means dredged spoil, solid waste, biological materials, rock, sand, and cellar dirt, among others. 33 U.S.C. §1362.

1. Federal Matters:

Under the River and Habor Act of 1899, a continuing source of law for protection of navigable waters, it has been unlawful to discharge or deposit from a ship or floating craft of any kind, or from the shore, manufacturing establish-

ment or mill of any kind, any refuse matter other than that flowing from streets and sewers and passing therefrom in a liquid state into any navigable water of the United States. 33 U.S.C. §407. Likewise, it has been unlawful to deposit material in any place on the bank of a navigable water where the same is liable to be washed into the navigable water by tides, storms or floods, whereby navigation may be impeded or obstructed. It provides that the Secretary of the Army, whenever the Chief of Engineers has determined that anchorage and navigation will not be injured thereby, may permit the discharge of refuse into the navigable waters. While the prohibition of deposit and discharge remains, the permit authority of the Secretary of the Army as to "pollutants" has been superceded by the permit authority provided to the Administrator of the Environmental Protection Agency under the Federal Water Pollution Control Act Amendments of 1972. 33 U.S.C. §1342. The same amendments of 1972 authorized the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill material into navigable waters at specified disposal sites, although the Administrator of the EPA has the right to set certain guidelines and to prohibit or restrict certain disposal sites upon finding that the same would have an unacceptable or adverse affect on municipal water supplies, shellfish beds and fishery areas, wildlife or recreational

areas. 33 U.S.C. §1344. The consequence appears to be that a person seeking to act with respect to dredging or fill must secure permits from both the EPA and the Corps of Engineers. Under the Amendments of 1972, each state is invited to submit, for EPA approval, a program under which the state agency will issue discharge-permits insuring compliance with effluent limitations and standards of performance. 33 U.S.C. §1342(b), 1316(c). The Indiana Stream Pollution Control Board of the Indiana State Board of Health has complied with these sections and is the state agency issuing such discharge permits. Such state issued permits remain subject to review and veto by the EPA Administrator. 33 U.S.C. §1342(d).

The River and Harbor Act of 1899 also declares it to be unlawful to excavate or fill the course, location, condition or capacity of any harbor, lake or enclosure within the limits of any breakwater or of any channel of any navigable water of the United States unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army prior to beginning the same. 33 U.S.C. §403.

33 U.S.C. §402, of the 1899 Act, authorizes the Secretary of the Army to establish harbor lines for the preservation and protection of harbors beyond which no deposits may be made without further permission from him.

Under 33 U.S.C. §419, the Secretary of the Army is

authorized to prescribe regulations to govern the transportation and dumping into any navigable waters or waters adjacent thereto of dredgings, earth and other refuse materials of every kind and description. See: 33 C.F.R. 205.10 for regulations. In 1910, the Congress dealt with depositing, dumping and discharge into Lake Michigan at any point opposite or in front of the County of Cook, in Illinois, or the County of Lake, in Indiana, within eight miles from the shore of said Lake. It made it unlawful to deposit, dump or discharge any refuse matter of any kind whatsoever other than that flowing from streets and sewers and passing therefrom in a liquid state into the Lake, unless said material was placed inside of a breakwater so arranged as not to permit the escape into the body of a lake or to cause contamination thereof. 33 U.S.C. §421.

Under 33 U.S.C. §1371, the Water Control Pollution Act Amendments of 1972, discharges of pollutants into the navigable waters subject to the Rivers and Harbors Act of 1910 and the Supervisory Harbors Act of 1888 are to be regulated by the amendments of 1972, except as to the effect on navigation and anchorage. The same section states that the amendments of 1972 shall not be construed as limiting the authority or functions of any officer or agency of the United States under any other law or regulation not inconsistent with the chapter, or affecting or impairing the authority of the Secretary of the Army to maintain navigation under

the River Harbor Act of 1899; except that any permit issued under 33 U.S.C. §1344 of the Amendments of 1972 shall be conclusive as to the affect on water quality of any discharge resulting from any activity subject to 33 U.S.C. §403.

As presented earlier, 16 U.S.C. §662 imposes the requirement that whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened or the stream or other body of water controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under a federal permit or license, such department or agency first shall consult with the United States Fish and Wildlife Service of the Department of the Interior with a view to the conservation of wildlife resources. The report and recommendation of the Secretary of the Interior, and any like report by the head of a State Agency, on the wildlife aspects and the suggestions for preventing the loss of or damage to wildlife resources shall be made a part of any report submitted to the federal government responsible for the engineering surveys and construction of the project and subsequently to the Congress or any agency thereunder having authority to authorize the construction of the project. With some limitations, the federal agencies authorized to construct and operate the water project are authorized to modify or add to the structures or operation in order to accommodate the means and measures

for conservation of wildlife resources as an integral part of the project. 33 U.S.C. §662(c).

The interpretation by the court that under the Water Pollution Control Act Amendments of 1972, the Congress intended to exercise its powers over the waters of the United States to the fullest, and by defining the term "pollutant" to include fill and dredge material, the dredging or filling of the waters of the United States are firmly regulated by both the Department of Army, through the Chief of Engineers, and by the Environmental Protection Agency, through its authorized state agency. Any such dredge or fill activity may only occur upon satisfying these regulatory and permit issuing authorities that navigation will not be impaired or obstructed, and that effluant limitations as to water quality will be met.

2. State Matters:

The Department of Natural Resources of the State of Indiana is charged with the power, duty and authority to issue permits to any person to take sand, gravel, stone or other mineral or substance from or under the bed of the navigable waters of the state. I.C. 14-3-1-14(10). In addition, the Department of Natural Resources has the right, power and duty to determine, designate and define natural drainage and reclamation areas, and to prepare the engineering computations relating thereto. I.C. 14-3-1-15.

It remains unlawful for any person to extend the

shoreline of a meandered or unmeandered public fresh water lake in Indiana (defined to exclude Lake Michigan or any lake in Lake County) by excavating or by filling into the waters of such lake without the permission of the Department of Natural Resources. I.C. 13-2-11-2. It is unlawful to make any deposit or excavation in or on any floodway which will adversely affect its efficiency, unduly restrict its capacity, constitute an unreasonable hazard to the safety of life or property, or be deterimental to fish and wildlife. I.C. 13-2-22-13.

Riparian owners bordering on the waters of Lake Michigan are given a statutory right to fill in and reclaim the submerged land adjacent to their property between the shore and the harbor line, with the approval of the Governor and the Natural Resources Commission. I.C. 4-8-13-1,-2,-3.

There are various statutes of the State of Indiana relating to surface mining and strip mining, including the provisions for issuance of permits and the requirements for reclamation. I.C. 14-4-2-1 et seq.; I.C. 13-4-6-1 et seq. Within the Department of Natural Resources is an oil and gas division which regulates the drilling and production aspects of oil and gas within the state. I.C. 13-4-7-1 et seq. The Department of Natural Resources is given authority to contract with others for the exclusive right to prospect and explore for petroleum on public lands of the state.

I.C. 14-4-3-1 et seq. This Act requires that a permittee compensate owners of private rights and the State of Indiana for damage to the surface rights, and it further provides for royalty payments. This Act would authorize the Department of Natural Resources to lease lake beds and river beds for prospecting, exploration and production of petroleum. I.C. 14-4-3-25.

E. WATER LEVELS:

1. Ordinary High Water Mark - A Search for Definitions:

At common law, the "ordinary high water mark" with respect to the ocean, sea and other water bodies in which the tide ebbs and flows meant the high line on the shore marked by the normal periodic flow of the tide. Unlike the waters of England, or ocean states, lakes, rivers and streams of Indiana are not subject to tidal changes.

In Indiana, therefore, "ordinary high water mark" is the line described by the water at its ordinary stage from season to season unaffected by extraordinary flood or drought, and unchanged by artificial means.

The United States Supreme Court established a definition of "ordinary high water mark" of a navigable stream in the case of Howard v. Ingersoll, 54 U.S. 380 (1851). The court used the "vegetation test", setting the mark to be a point up to which the presence and action of the water is so continuous as to destroy the value of the land for agricultural

purposes by preventing the growth of vegetation. After further qualifying its definition, the court said:

> "Such a line may be found upon every river, from its source to its mouth. It requires no scientific exploration to find or mark it out. The eye traces it in going either up or down a river, in any stage of water." Howard v. Ingersoll, 54 U.S. at 415.

The Federal court have not restricted the determination to the vegetation test alone.

If there is a clear and natural line impressed upon the bank, it is to be given equal consideration in determining the "ordinary high water mark."

> "If there is a clear line, as shown by erosion, and other easily recognized characteristics such as shelving, change in the character of the soil, destruction of terrestrial vegetation, and litter, it determines the line of ordinary high water. . . Another important consideration in determining the line is the character of a bank or shore at the particular site in issue." Borough of Ford City v. United States, 343 F.2d 645, at 648 (3rd Cir. 1965)

Although some Indiana decisions refer to the "ordinary high water mark" the courts have not added a precise definition with its use. Perhaps hard to define, apparently one knows it and recognizes it when he sees it.

The Corps of Engineers under the Secretary of the Army, has prepared regulations for the disposal of dredged and fill materials under 404(a) of the Federal Water Pollution Control Act Amendments of 1972. 33 U.S.C. §1344. The Corps of Engineers have adopted the following definition:

> "Ordinary high water mark" with respect to inland fresh water means the line on the shore

> established by analysis of all daily high waters. It is established as that point on the shore that is inundated 25% of the time and it is derived by a flow-duration curve for the particular water body that is based on available water stage data. It may also be estimated by erosion or easily recognized characteristics such as shelving, change in the character of the soil, destruction of terrestrial vegetation or its inability to grow, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area. 40 Fed. Reg. 31325 (1975).

This definition by the Corps of Engineers represents a combination of the various definitions established by case law and logic, and probably represents an appropriate definition for "ordinary high water mark" of Indiana's lakes, rivers and streams.

2. Great Lakes Water Levels - The International Joint Commission of the United States & Canada:

(a) Generally:

The International Joint Commission (IJC) is a permanent international body composed of representatives of the United States and Canada and authorized by the Boundary Water Treaty of 1909. Its purpose, generally, is to provide for adjustment and settlement of problems and disputes over the use of the waters along the common boundary between the two countries.

Under the treaty, the IJC was given two major functions. One is the authority to approve applications for obstructions, uses or diversions of water which affect the natural level or flow of water on either side of the international boundary line. The IJC, for example, approved the St. Mary's River (Souix St. Marie) project and the dams located at Massena,

New York.

The other major function concerns references of matters or problems affecting the common boundary of the two governments, and the IJC is charged with investigating and reporting findings to the two governments. The United States and Canada, following such reports and recommendations, each decide whether to accept or act upon the recommendations of the IJC.

At the present time, the water levels of only two of the Great Lakes, Lake Superior and Lake Ontario, are regulated. On October 7, 1964, the IJC was directed to study the feasibility and public benefit of further regulation of the water levels of the Great Lakes. Such regulation, it is suggested, would avoid the present high and low levels due to cyclical changes, control flooding, improve domestic water supplies, sanitation and navigation. From such regulation, it is suggested, the Great Lakes could provide increased use for power, for agricultural, for recreation, and for conservation of fish and wildlife.

Although the present crisis in Lake Michigan is due to high water levels in the Great Lakes, the Great Lakes basin moves in irregular cycles. One may anticipate that the future will bring low water levels which would reduce the present shoreline erosion problem but adversely affect commerce and navigation. One ought to think of the several Great Lakes as a basin. The water levels of the Great Lakes are

interdependent upon one another and solution of problems should be approached with this in mind.

The fluctuation in the water levels of the Great Lakes are generally considered to be of three different classes. The first are the long term fluctuations. They are caused by persistent high or low supplies of water in the basin, and for the most part determined by annual precipitation above or below normal amounts. Second are the seasonal fluctuations which are reflections of the annual hydrological cycle. Ordinarily, this causes peak levels of water supplied to the basin during the spring and early summer from thawing of melting snow and runoff of excess water. The third is a short period fluctuation, which is ordinarily caused by meteorlogical disturbances on a more day to day basis. Rain storms, and wind-induced waves are typical examples.

(b) Recent Problems, Actions and Proposals:

The record high water levels of the Great Lakes during the early 1970s with its attendant damage to shorelines and property, has caused a critical re-evaluation to be made of the water level regulation policy as set forth by the treaty.

In 1914, upon recommendation by the IJC, the United States and Canada granted permission to use part of the outflows from Lake Superior for power and generation. A condition of this provision was that the level of Lake

Superior be maintained "as nearly as may be" between 600.5 feet and 602.0 feet, International Great Lakes Datum (IGLD). The plan was designed to allow outflow from Lake Superior for the sole purpose of maintaining the water in Lake Superior within the Treaty level, and is known as the 1955 Modified 1949 Plan.

In an effort to combat the damages caused by the high water levels, the United States applied to the IJC to reduce the flow from Lake Superior to Lake Michigan and Lake Huron. On February 1, 1973, a new proposal, known as the SO-909 Plan, was approved. Under the new plan, the outflow from Lake Superior would be adjusted from time to time so that Lake Superior, on the one hand, and Lake Michigan and Lake Huron, on the other hand, would be kept in the same relative proportions above or below their long term average levels for the period from 1900 to 1967. The IJC recognized that by maintaining a higher level on Lake Superior additional damage may be caused to the littoral or riparian owners along its shore, and recommended that reasonable compensation be made to these owners. Apparently, the SO-909 Plan, so far, has not brought the lake level of Lake Superior above the maximum 602 feet required by the Treaty.

(c) Recommendations for the Future:

On February 26, 1974, the IJC gave a briefing to the Conference of Great Lake Congressmen, and the Committee on

Public works of the House of Representatives of the United States. This briefing was with respect to a study report on a matter originally requested on October 7, 1964, regarding the regulation of Great Lakes water levels. The IJC's findings are summarized as follows:

1. The new plan SO-909 is expected to provide small benefit to the problems created by high and low water levels.

2. The construction of control works to regulate all five lakes has an unreasonably high cost ratio to anticipated benefits.

3. To accomplish regulation of all lakes, the St. Lawrence river would need substantial improvement. Such improvement has inherent dangers especially to the City of Montreal, Canada.

4. The more feasible solutions involve:

   (a) Land use zoning; and

   (b) Structural setback requirements.

A United States representative suggested the funding of relocating individuals and even communities from the shore area, at government expense. He noted that such relocation has traditionally been included as a part of the federal government's interstate highway program, and he suggested that the analogy to water commerce was an appropriate one.

At the present time, the IJC report is under consideration by the Department of State of the United States, and the corresponding branch of Canada. The Department of State is reviewing these recommendations with the affected states and with interested federal agencies. In addition, communities

along Lake Michigan and particularly in Illinois, are seeking to increase the present limitation on diversion of Lake Michigan water set by the court at 3,200 cubic feet per second. However, curing one problem often leads to the creation of a new one. Any action to ameliorate existing problems in the Great Lakes system from Lake Superior outward through the St. Lawrence River to the Atlantic Ocean has the likelihood of creating new problems. Likewise, increased diversion at and about Chicago could create increased levels along the Mississippi River and create flood damage to that river system.

ARTICLE VIII

GOVERNMENTAL AND REGULATORY JURISDICTIONS WITHIN THE COASTAL ZONE

A. STATE AND FEDERAL:

The state and federal governmental and regulatory bodies having jurisdiction within the coastal zone are many. A listing of these would not advance the knowledge of a person interested in these matters. Therefore, the state and federal bodies are identified and discussed in other aspects of this study in a manner tending to better explain their duties, powers and inter-relationships.

B. LOCAL - AN INTRODUCTION:

The powers of local governmental bodies may affect decisions as to the use of coastal resources. Their powers, however, are for the most part conferred through general legislation of statewide impact.

Local government in Indiana generally comprises cities, towns, counties and to a lesser degree, townships. Each of these units of local government possess specific authorities to initiate or facilitate certain projects using land or affecting the use of land. Except for townships, these units of local government possess powers to restrict certain land

uses. In addition to specific powers, a broad residual power, or home rule, has been expressly conferred on cities and counties by the General Assembly during the past few years.

C. LOCAL - FORMATION OF COUNTY, CITY OR TOWN:

In Indiana, all civil cities of the State are classified by population into five groups, from first class city to fifth class city. I.C. 18-2-1-1. The creation of cities from towns and the creation of new or altered counties from existing ones is essentially dependent upon popular initiation. The procedure for creation of cities from towns is found generally in I.C. 18-3-3-1 et seq., and the procedure for formation or alteration of counties is generally found in I.C. 17-1-10-1 et seq., and 17-1-12-1 et seq.

A civil town does not become a civil city automatically upon attaining a certain population level. Rather, the procedure for creation of a civil city a the town must be observed. See: I.C. 18-3-2-1. However, a city of one class apparently will automatically become a city of another class "by reason of a change in population." I.C. 18-2-1-3.

The incorporation of civil towns lies substantially in the control of the Commissioners of the County in which the proposed town would lie. See: I.C. 18-3-1-3 to 11. If the county commissioners are reasonably satisfied that certain pre-requisites are met, then hearings for incorporation

of a town may proceed. See also: Hatcher v. Board of Commissioners of Lake County, 155 Ind. App. 27, 290 N.E.2d 801 (1972).

The abolition of townships, or the alteration of their boundaries, lies within the power and discretion of the board of county commissioners, which board may exercise this determination only after petition by a majority of the freeholders of the township or townships to be affected. I.C. 17-1-21-1.

D. LOCAL GOVERNMENT - SOME SPECIFIC AUTHORITIES:

1. Annexation:

Civil cities have the power to annex contiguous territory in one of two ways. An ordinance is adopted which becomes final and binding 60 days after publication unless a certain number of landowners in the area to be annexed file a remonstrance with a court of appropriate jurisdiction, and the remonstrance is sustained. I.C. 18-5-10-19, 20, 24 and 25.

Annexation may be made by a procedure under which a majority of the owners of real estate within a given territory outside but adjacent to the city boundaries petition the common council for the annexation of that territory. If the common council fails to pass an ordinance annexing the territory, the petitioner's may file a request for annexation in a court of appropriate jurisdiction. The court has the power to order annexation provided certain determinations are made, among others, that the civil city is able to provide the

territory with principal municipal services not then available to the territory. I.C. 18-5-10-23.

Civil towns, likewise, have the powers to annex adjacent territory by procedures essentially the same as those required of civil cities. See: I.C. 18-5-10-30. Towns are restricted, however, in annexation and may not annex territories which lie within certain distances, by miles, of first, second and third class cities without the approval of the common councils of those cities. I.C. 18-5-10-31.

2. Sewers, Sewage and Waste Disposal:

Cities have extensive powers with respect to sewage and waste materials. They have specific power to construct, maintain, control and operate facilities under the General POwers of Cities Act of 1971; under its general police powers, cities can deal with respect to health, sanitation and control of public facilities. I.C. 18-1-1.5-7(k), 7(j), and 14(k).

In most cities, powers are given for the establishment of a board of sanitary commissioners who operate, generally, as a separate taxing district. I.C. 19-2-14-1; I.C. 19-2-18-1; and I.C. 19-2-27-1; I.C. 19-2-28-1. In addition, the city may carry out these same functions within a department of the city.

The Refuse Disposal Act sets forth the methods by which cities and towns may finance various solid and semi-solid waste disposal facilities. I.C. 19-2-1-1 et seq.

It appears that certain sanitary districts may charge

for sewage disposal services, determine rates and charges for residential as well as industrial users, and contract with users outside the limits of the district. I.C. 19-2-20-1 et seq.; I.C. 19-2-14-32.

In 1967, the General Assembly added another separate law authorizing sewage treatment plants. I.C. 19-2-5-1 et seq.

It authorized cities and towns to acquire and operate sewage treatment plants and all of the connecting sewers, mains and the like necessary and convenient to collect, treat and dispose of, in a sanitary manner, liquid and solid waste, sewage and industrial waste of the city. It authorized the establishment of charges and rates in harmony with the services rendered, and the method for collecting the same. By 1975 amendment, charges and rates can now be fixed on one or any combination of various bases, including flat charge, amount of water used, number and size of water outlets, and the like.

Although counties are included in the grant of power made under the Refuse Disposal Act (I.C. 19-2-1-1 et seq.), they are specifically denied jurisdiction over the construction, operation or maintenance of the publicly owned or financed sewer systems or the sanitation and disposal plants (I.C. 17-2-22-3). However, townships and counties, including other political subdivisions and entities, may petition the Stream Pollution Control Board of the State of Indiana for the organization of a regional water and/or sewage district.

I.C. 19-3-1.1-1 et seq. After notice and hearing, the Stream Pollution Control Board may approve a plan establishing such a regional district, and if so, extensive powers are given to its board of trustees and officers including authority for condemnation and issuance of revenue bonds. I.C. 19-3-1.1-8, 12, 15 and 17.

3. Powers to Regulate:

Cities are granted broad powers to take action and exercise controls to preserve peace and good order, and to secure freedom from dangerous and noxious undertakings or activities. I.C. 18-1-1.5-6. A city has the power to take action and exercise controls to secure and promote the general public health and welfare, to establish, maintain and control public ways, to establish, maintain and control water courses, to take actions and exercise control relating to improvement, maintenance and use of real property including planning, zoning and construction of buildings, to exercise control relating to the improvement, maintenance or use of real property below ground level, including the introduction of any substance into any underground stream or body of water, to exercise control relating to the use of air, to regulate businesses that affect the public health or safety, to establish, maintain, control and operate public and municipal facilities, to establish, maintain and operate a police and law enforcement system, a fire fighting and prevention system, and the facilities and equipment to conduct said systems, and certain residual

powers discussed below. I.C. 18-1-1.5-6 to 16.

The cities are denied the exercise of any judicial power, and are denied certain powers reserved exclusively to the state such as laws governing private or civil relationships, defining and providing for the punishment of crimes and the power to require a certificate of permit generally under the jurisdiction of the Public Service Commission. I.C. 18-1-1.5-18, 19. Cities shall not exercise certain powers unless they are expressly granted to it by law. I.C. 18-1-1.5-20. While towns have many of the same powers as cities, several powers are implied from others or deemed by it to be reasonable and necessary to carry into effect the specific powers granted to it. I.C. 18-3-1-35 to 52.

Townships appear to have no express powers to limit or restrain private actions or uses of property. Prior to home rule, discussed below, counties were limited to specific powers of regulation, such as the power to enact plumbing ordinances, fire prevention ordinances and minimum housing code provisions. I.C. 17-2-48-2; I.C. 17-2-21-1; and I.C. 17-2-72.5-1. Traditionally, powers not expressly granted to counties have been taken to lie beyond their authority. See: 1967 O.A.G. No. 64, page 34.

E. HOME RULE:

1. Home Rule - For Cities:

In 1971, the Indiana General Assembly conferred a form of home rule on cities, without distinction as to their various classes. I.C. 18-1-1.5-1; I.C. 18-1-1.5-16.

In section 1 of the Powers of Cities Act, it provides:

> "All cities shall have the powers set forth . . ., which powers may be exercised within their territorial limits, and in such additional areas as may be specified herein, to the extent deemed by the appropriate branch, officer, department or agency of any city to be necessary or desirable in the public interest of its inhabitants. Any such power may be exercised by a city under authority of this chapter only if and to the extent that such power is not by express provision denied by law or by express provision vested by any other law in a county, township or the state, special taxing district or separate municipal or school corporation." I.C. 18-1-1.5-1, as amended.

This section seems to authorize the exercise by a city of these powers where such exercise may not be necessary but only desirable. The latter portion of the section was amended, as shown, and is a substitution for the original language of limitation ". . . to the extent that such power is denied or pre-empted by any other law or is not vested by any other law . . ."

After enumerating specific powers for cities, the Legislature concluded with section 16 of the Power of Cities Act which provided that in addition to the powers specifically enumerated,

> ". . . Every city may, within its territorial jurisdiction, except as otherwise provided in this chapter, exercise any power or perform any function necessary in the public interest in the conduct of its municipal or internal affairs, which is not prohibited by the Constitution of this state or the Constitution of the United States, and which is not by express provision denied by law or by express provision vested by any other law . . ." I.C. 18-1-1.5-16, as amended.

This section is entitled "Residual Powers." The exercise of a "residual power" may require stricter tests than those set forth in section 1 of the Act. The exercise of a "residual power" must be necessary (and not simply desirable), must be necessary (and not be deemed necessary), and it must occur in the "conduct of municipal or internal affairs" (and not simply "in the public interest").

One of the following sections lists the powers denied to the cities, which powers are reserved exclusively to the state. These powers denied include the power to enact laws governing private or civil relationships, the power to define and provide for the punishment of crime, except ordinances with certain limitations, and the power to franchise or permit to operate certain common carriers under the jurisdiction of the Public Service Commission. I.C. 18-1-1.5-19.

I.C. 18-1-1.5-20 further limits a city from exercising certain powers unless such powers are expressly granted by law, and then only to the extent and in the manner provided by law. They include the imposition of any tax, the imposition of duties

upon any other city, town or municipal corporation, the regulation of private activity outside its territorial jurisdiction and others.

In these sections, the Legislature apparently intended to turn around the traditional method of judicial construction and interpretation which held previously that cities can exercise only those powers which are specifically granted to it or necessarily implied or indispensible to the carrying out of its express powers. These sections may require substantial judicial interpretation; nevertheless, they suggest that the court exercise a contrary method of construction under which the power shall be considered to be possessed by the city unless expressly denied or expressly vested by some other law in some other governmental body.

2. Home Rule - Legislative Grant and Not Constitutional Amendment:

It is important to the understanding of the grant of home rule power to cities in Indiana that one recognize that the grant of residual powers was made by an act of the State Legislature and not by or through an amendment to the Constitution of the State of Indiana. The power of the legislature to grant or deny, to expand or contract the powers of cities, both those previously given as well as those allowed by these sections, has not been altered, restricted or limited in any manner.

Home rule in other state jurisdictions has had a firmer

foundation. In the State of Illinois, home rule was conferred upon municipal governments through a provision of the state constitution. See: Illinois Constitution, Article VII, Section 6. Moreover, the Illinois Constitutional provision requires that home rule units may not be denied or limited in their exercise of those powers not exercised by the state except by a law approved by three fifths of all the members elected to each house of the general assembly. In Indiana, the State Legislature, by simple majority, may withdraw all of the called home rule powers now in force.

3. Home Rule - Counties:

By an act of 1975, the counties of Indiana have been given home rule authority in much the same language as was granted to the cities under the provision relating to residual powers. I.C. 17-2-2.5-1 et seq. In a more direct fashion, the traditional rule of judicial construction was repudiated.

> ". . . The rule of law that counties have only those powers expressly conferred by statute, necessarily implied or (in)dispensible to its declared objects and purposes, and that any fair doubt as to the existance of a power shall be resolved against the existance thereof, shall have no application to the powers granted to counties herein." I.C. 17-2-2.5-6.

In conferring the residual powers to counties, the legislature authorized the exercise of any power or the performance of any function "necessary to the public interests and the conduct of its county or internal affairs," not otherwise

prohibited "or pre-empted by any other law" or not vested by any other law in any other governmental unit.

The act granting home rule to counties contains the pre-emption clause which was repealed from the home rule act related to cities. In addition, in the county act, the Legislature set out a statutory construction indicating when its intention shall be held to pre-empt the subject matter of such law or to occupy the field in which such law operates and thereby to deny the power to the county. I.C. 17-2-2.5-7.

4. Home Rule - Court Decisions:

To date, there have been some appellate court cases which have interpreted the grant and exercise of home rule by cities. To date, there have been no appellate court cases interpreting the 1975 Act granting home rule to counties.

In the case of City of Indianapolis v. Sablica, Ind. , 342 N.E.2d 853 (1976), Sablica sought to establish that an Indianapolis ordinance imposing fine and jail sentence for taunts or other disrespectful conduct toward police officers making arrests or conducting investigations was violative of the Indiana Constitution. Sablica argued that the ordinance violated the constitutional requirement that state laws defining crimes and misdemeanors shall be of uniform operation throughout the state, as found in Article IV, Sections 22 and 23 of the Indiana Constitution. He further argued that the existence of a state law concerning

interference with State officers in the execution of their duties, found in I.C. 35-21-4-1, pre-empted the subject matter of the law. In invalidating the city ordinance, the Supreme Court said:

> ". . . When the Legislature has enacted a general law defining a crime or misdemeanor, such action necessarily implies that there is no room for supplementary or complimentary local legislation, even if the subject were otherwise one properly characterized as a 'municipal affair.'" City of Indianapolis v. Sablica, Ind. , 342 N.E.2d at 854.

Since the Court ruled on the basis of the doctrine of pre-emption, it was unnecessary for the court to reach the constitutional questions which were also raised, and the court set aside the trial court's order declaring sections 18-1-1.5-1, 2 and 19 unconstitutional.

In an earlier decision, the City of Bloomington adopted a landlord - tenant ordinance, which the Appellate Court held to be invalid as an attempt by the City to legislate its own private contract law for landlords and tenants in violation of I.C. 18-1-1.5-19 of the 1971 Act which particularly denied to cities the power to enact laws governing private or civil relationships. The City of Bloomington v. Chuckney, Ind. App. , 331 N.E.2d 780 (1975).

The Appellate Court also struck down an order by the Richmond Board of Public Works which directed the owner of a fast food restaurant to remove a curb cut previously approved by the Indiana State Highway Commission. In an effort to

support the action of the Board of Public Works, counsel for the city argued the residual powers section. The Appellate Court concluded that the city's order was not issued pursuant to an adequately detailed ordinance, and the residual powers section "is clear in stating that a municipality's residual powers are to be exercised by ordinance." City of Richmond v. S.M.O., Inc., Ind. App. , 333 N.E.2d 797, 799 (1975).

One of the first cases which affirmed a city's use of the residual powers was a federal decision entitled Barrick Realty, Inc. v. City of Gary, 491 F.2d 161 (7th Cir. 1974). The City of Gary enacted an ordinance prohibiting the display of "for sale" and "sold" signs on premises located in residential areas of the City. The Court of Appeals for the 7th Circuit upheld the trial court's finding that the ordinance was within a permissible range of powers authorized by I.C. 18-11.5-16 as an exercise of power necessary in the public interest and the conduct of its municipal affairs to prevent "panic peddling" of real estate in racially changing areas.

F. ZONING AND SUBDIVISON CONTROL:

1. The Zoning Power - Generally:

> ". . . (Z)oning is a process. It is part of that political technique through which the use of private land is regulated. When zoning is thought of as a part of the governmental process, it is obvious that it can have no inherent principals separate from the goals which each person chooses to ascribe to the political process as a whole." Babcock, The Zoning Game: Municipal Practices and Policies,

1966 at page 125.

The zoning powers are based upon the exercise of the police power of the state, granted to its political subdivisions, to be exercised in the interest of public health, safety and general welfare.

The essential fiber of a zoning ordinance is its comprehensive plan,

> "A plan that makes provision for all the uses that the legislative body of the municipality decides are appropriate for location somewhere in that municipality; . . . at the intensity of use that the legislative body deems to be appropriate . . . Beyond that the plan should consistently represent development objectives of the community." Babcock, supra, at page 122.

The constitutionality of the authority to enact a comprehensive zoning plan was first approved by the United States Supreme Court in 1926 in the case of Village of Euclid v. Amber Realty Co., 272 U.S. 365 (1926). The courts of Indiana have acknowledged the powers of municipalities, in relation to the public health, safety and general welfare, to enact comprehensive zoning ordinances under specific enabling legislation of the state.

2. Zoning - Enabling Legislation:

The principal enabling legislation for cities and counties was recodified in 1947 and remains as the basic authority for planning, zoning and enforcement. I.C. 18-7-5-1 et seq.

Under its provisions, every city and county may by ordi-

nance create a plan commission in order to promote the orderly development of its governmental units and its environs. The plan commission will serve in an advisory capacity to boards and officials, and in addition, it will have certain regulatory powers. I.C. 18-7-5-1.

Among its powers is the authority to make recommendations to the legislative body of the municipality on the adoption of the master plan, its ordinance and amendments thereto, to render decisions concerning and to approve subdivision plats, to develop plans for residential, commercial and industrial uses, and to formulate policies for the development of public thoroughfares, structures and utilities. I.C. 18-7-5-28, 32.

The legislation prescribes the various subject matters which may be included in a master plan and grants authority to the commission to certify major street or highway plans. I.C. 18-7-5-37, 38.

After adoption of the master plan ordinance, the legislative or governing body of the political subdivision is to be guided and give and consideration to the general policy and pattern of development set out in the plan, and upon request for amendment, procedures are provided which require review and public hearing before the plan commission, and recommendation to the legislative body before its consideration. I.C. 18-7-5-46.

The plan commission has exclusive control over the approval of subdivision plats. I.C. 18-7-5-54. This same act allows for the establishment of a board of zoning appeals which is empowered to hear and determine appeals from decisions made by administrative officials in the enforcement of any ordinance or regulation and to grant variances from the strict enforcement of the ordinance owing to special conditions which would otherwise result in unnecessary hardship.

Persons aggrieved by the action of either the plan commission or the board of zoning appeals have the statutory right to seek review in courts of competent jurisdiction. I.C. 18-7-5-57, 88. State too?

The power to zone or rezone is a legislative one to be exercised by the council of the city or the board of the town, subject to the powers of the plan commissions.

3. Zoning - Other Planning and Zoning Authority:

The Metropolitan Planning and Zoning Act of 1955 does not have application to the coastal zone because it applies only to counties containing first class cities, and the only first class city in the State of Indiana is Indianapolis, and its county is Marion. I.C. 18-7-2-1 et seq. Another act provides for consolidation of planning operations by city and county, but are restricted to counties not within the coastal zone. I.C. 18-7-3-1 et seq.

Commentators on the zoning process in Indiana have had two major criticisms. One is that the municipal political sub-

division is too small a unit within which to exercise land use planning to the greater public interest. Such critics suggest that regional or even larger areas should be planned. The second criticism relates to the fact that zoning power in Indiana is exercised by local elected officials acting as a legislative body. The observation of such critics is that the legislative function has caused zoning to become tainted by politics and the parochial interest of local pressure groups.

I.C. 18-7-4-1 et seq., created an area planning act which authorized cities, towns and counties to cooperatively establish a single and unified planning and zoning agency to deal with the development of their communities on a county wide basis. The Act did not apply to Lake County, Indiana, or the cities therein, or to a county under which county-wide planning and zoning is made mandatory by present or future legislation. I.C. 18-7-4-98. Nevertheless, it has application in the other counties under study, Porter and LaPorte, and by future amendment may be made applicable to Lake County.

A city or county desiring to participate in the establishment of an area wide planning department adopts an ordinance, under the act. I.C. 18-7-4-4. Whenever the county and at least one city within the county have each passed such an ordinance, and fixed the time for the establishment of such

a department, the board of county commissioners then establishes the area planning department as a part of county government. Any non-participating city shall have no authority thereafter to exercise planning and zoning powers outside its municipal boundaries. I.C. 18-7-4-6. Other cities may adopt such ordinances accepting the provisions of the Act and provide for their appointment of representatives to the Area Plan Commission. The Act prescribes the basis for representation of rural and urban populations, designates the number of county representatives and city and town representatives, and provides for other representation.

The duties of the Area Plan Commission are substantially similar to those granted by the general enabling legislation for cities, towns and counties. See: I.C. 18-7-4-25. The Area Plan Commission is to appoint an Executive Director, to establish a comprehensive plan of the county including a major or highway plan, and then certify the same to the legislative bodies of the participating cities, to the county council and to the board of county commissioners. The comprehensive plan is not official unless and until it has been approved by each of the legislative bodies. I.C. 18-7-4-33 to 45.

At the same time, the Area Plan Commission shall recommend to the several legislative bodies an ordinance for the zoning or districting of all lands within the county. After notice and public hearing, and certification of the zoning ordinance to the legislative bodies, it shall take

effect unless the legislative body has within 60 days acted other than favorably, or unless a petition has been filed with the commission signed by 25% of the registered voters in any township requesting that the ordinance as applied to the township be submitted for a referendum election. As to such township, it shall be held ineffective until approved by a majority vote, but it shall be applicable to the remainder of the county and the remainder of other participating cities. If a legislative body has rejected or amended the ordinance, and it is returned to the commission, the commission shall act with respect to the matter. If the commission has disapproved the amendment or rejection, the action of the legislative body on the original amendment or rejection shall stand only if confirmed by a constitutional majority vote of the town board or city council or a majority vote of the board of county commissioners. I.C. 18-4-46 to 55.

The Area Planning Act also provides for subdivision control, plat approval and the creation of a board of zoning appeals. I.C. 18-7-4-56 to 80. The duties of the Area Plan Commission with respect to subdivision and appeal is similar to that of the general planning and zoning act.

Other acts of the General Assembly authorize a multi-county planning commission, and the joinder of townships with city planning agencies. I.C. 18-7-5.5-1 et seq.; I.C. 18-7-6-1 et seq.

ARTICLE IX

PLANNING - THE REGIONAL CONCEPTS

A. PLANNING - THE REGIONAL PLANNING COMMISSIONS:

At present, there are two Regional Planning Commissions having jurisdiction within the three county area comprising the preliminary coastal zone. The Northwestern Indiana Regional Planning Commission (NIRPC) has been established by legislative bodies of Lake and Porter Counties, and the Michianna Area Council of Governments (MACOG) has been established by the legislative bodies of LaPorte, St. Joseph, Elkhart, Marshall and Kosciusko counties.

I.C. 7-7-1.1-1 is the act adopted by the General Assembly to provide for regional planning where legislative bodies desire to have it. The General Assembly first declared a need to plan comprehensively for the future development of the various regions of the state. It further found that the problems of growth and development transcended boundary lines of governmental units such that the solution of problems could not be accomplished by one single unit of government without affecting other units. The General Assembly determined that inter-governmental cooperation on a multi-county and multi-jurisdictional basis is an effective method to approach common planning and to obtain more efficient solutions to common problems of local government within the state. At the same time, the legislature acknowledged that local units of

government, which are closest to the people, ought to provide the basic initiative and leadership and have the primary responsibility for dealing with multi-jurisdictional problems.

The regional planning commission is established whenever the legislative bodies of each of the counties adopt concurrent resolutions requesting their establishment. I.C. 18-7-1.1-2.

The Act prescribes the method of appointing membership to the commission, and prescribes that at least two-thirds of the commission membership shall be elected officials. I.C. 18-7-1.1-4.

The powers and duties of the commission include the initiation and maintenance of a comprehensive policy planning and programming process for the entire region, the coordination of its activities with all local units of government, and the coordination of the planning programs of the various units of government. The commission shall act in an advisory capacity only. By a majority of its membership, the commission may adopt any regional comprehensive or functional plan, program or policy. It may receive grants to carry out its activities including grants, loans and other forms of financial assistance under the provision of any federal grant program. It may enter into coordinative arrangements with adjacent political subdivisions within the state or with an adjoining state or with other regional or multi-county agencies. It shall act as the designated review agency and as the clearing house as described in Federal Office of Management

and Budget Circular A-95 (A-95 Clearing House Review). I.C. 18-7-1.1-5.

The use, purpose and function of the regional planning commission has increased substantially, particularly because many major federal programs require local units of government to utilize regional planning before grants to them may be approved. Regional comprehensive planning processes are now dealing with such major issues as water quality management, transportation, and solid waste management.

B. PLANNING - STATE PLANNING SERVICES AGENCY:

In 1975, the Legislature created a fund to be administered by the State Planning Services Agency of the State of Indiana under which regional planning and development commissions, defined as any multi-jurisdictional or multi-county agency, could request funds for the purpose of providing technical assistance to local units of government for planning, and to list federal grants for planning for which such regional planning and development commissions had applied or intended to apply but which needed matching funds.

In addition to regional planning commissions, the State Planning Services Agency was created within the executive office of the Governor, to perform certain functions of state planning services. I.C. 4-3-7-1 et seq. It was the legislative intent that the State Planning Services Agency provide planning assistance on both community and state levels, and to

do planning work including surveys, land use studies and technical services and all other elements of the comprehensive planning program. I.C. 4-3-7-2. The present Coastal Zone Management program is being administered by this agency on behalf of the State, as is required by the federal act creating the program.

The State Planning Services Agency may also be responsible to perform the planning functions within the State of Indiana under requirements of the Water Pollution Control Act Amendments of 1972 where there are no regional, multi-jurisdictional or multi-county planning bodies who have jurisdiction within an area of the State.

In this field, one can sense the impact of the federal and state governments, and regional planning bodies upon land use regulation. Their entry and their powers may appear to satisfy those critics who believe the land use regulation should take on a scope broader than municipal boundary lines. As one would expect, there are those who believe that increasing the area of planning will not offer greater solutions to existing problems.

> "In sum, state planning is not the answer. This is not because there is something inherently wrong with state planning (or there is not) or that the states should not be encouraged to set up stronger planning agencies. It is just that one should be aware of what is likely to come from this level. Planning and zoning have traditionally been local responsibilities. Nothing has happened to suggest that state planning and zoning will be any better. The same

> political forces are operative at both levels." Linowes and Allensworth, The Politics of Land Use, 1973 at page 165.

Notwithstanding the impression of Messrs. Linowes and Allensworth, the Congress of the United States has had a land use policy and planning assistance bill before it for several years, which legislation has been narrowly defeated on several occassions. Among its purposes is to develop and maintain sound policies and coordination procedures with respect to federally conducted and federally assisted projects on non-federal lands having land use implications. It would establish federal guidelines to implement the act, review state wide land use planning processes and state land use programs for conformity to the act, and assist in the coordination of the activities of federal agencies with state land use programs. The impact of the proposed federal legislation would be to subject local controls to minimum standards as developed by the federal and state agencies.

C. STATE PLANNING UNDER FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972

Following the enactment of the Federal Water Pollution Control Act Amendments of 1972, and their subsequent regulations, an astute journalist in Louisville, Kentucky, commented:

> "TWO-O-EIGHT. Remember §208. If you live in the Louisville area, it could well affect your life.
>
> 'Section 208 is an obscure passage in a law

passed by Congress two years ago: the 1972 amendments to the Federal Water Pollution Control Act.

'While the law's major thrust is the cleanup and prevention of water pollution, the sections that have to do with planning could affect the growth of America's cities. Section 208 could influence where factories will be built, where highways will go and where subdivisions will be situated. In short, it could determine how and where people will live in the next 20 to 50 years." Louisville Courier - Journal & Times, June 9, 1974.

The states have initiated a far reaching planning process for the purpose of achieving the water quality goals set out in the 1972 amendments. The process may be described as a joint venture between state agencies and the multi-county or regional planning agencies sharing in the responsibility. The process is likely to affect land-use decisions both directly through the regulation of potential dischargers, and indirectly through various discharge limitations.

Perhaps the most important single item coming from this planning process is a water quality management plan (WQMP), sometimes referred to as the "208" plan. Generally, it covers a certain area, usually within a state, and occassionally including contiguous portions of adjacent states. It may be prepared either by a state agency or by an area wide planning agency. Within the Indiana Coastal Zone study area, NIRPC is preparing a WQMP for Lake and Porter counties, and MACOG is preparing one for LaPorte and its neighboring counties. These plans are subject to

certification by the Governor of the state and approval by the Regional Administrator of the Environmental Protection Agency (EPA). Under present regulations, the latest deadline for submission of the plan to the EPA is November 1, 1978. See: 40 C.F.R. 131.20(i).

Although a water quality management plan is required to contain at least sixteen elements, there are three basic mechanisms to be designed or incorporated in such a plan. First, there is the long term program for area wide waste treatment management which is called for under §208 of the 1972 Amendments. Using population forecasts, the water quality management plan is to identify the twenty year municipal needs for waste water collection and treatment systems, and is to indicate the required capital necessary and the finance program to fund it. This waste water treatment component is to be used in establishing priorities for the award of construction grants under §201(g) of the 1972 Amendments.

Second, there is to be included in the plan a complex set of limitations on the amount of pollutants which sources may discharge into the state navigable waters. This process of limiting discharge has two beginning points:

1. Effluent limitations, generally established by the EPA and determining, for different classes or sources, maximum allowable discharges of pollutants.

2. Water quality standards, generally established by the state and determining, for different

waterways, appropriate uses and water quality criteria necessary to support those uses.

On the basis of these limitations and standards, each state is responsible for classifying its navigable waters into (a) segments where the application of class by class effluent limitations is sufficient to meet and maintain the appropriate water quality standard, and (b) segments where restrictions more stringent than such effluent limitations will be necessary to bring the water into conformity with the appropriate water quality standards. These "more stringent restrictions" are to be incorporated in, and in some cases revised by the water quality management plan. These restrictions take on specific form as "maximum loads" and as "load allocations": the maximum pollutant load which a water segment can sustain without falling below water quality standards is determined, and this load is specifically allocated among point source dischargers along that segment. A sources discharge of the pollutant in question may not exceed the allocation assigned to that source.

The classification of a particular waterway as a water quality segment may well affect and possibly deter development, especially industrial development, along the waterway because of these more stringent discharge limitations which fall upon the sources located along its banks or shores.

Third, there is to be incorporated in or defined by a water quality management program a set of more direct

regulatory programs, including land use controls, which are to shape development and use patterns in such a way as to avoid over burdening of the waste carrying capacities of the state waters. This area of direct regulation is still marked by a certain tentativeness. The water quality management plan regulations admit that new legislation on the state level may be needed to effectuate what the regulations require, namely control over the construction and modification of point sources and the application of best management practices with respect to non-point sources. The term "point source" is defined to mean any descernable conveyance including a pipe, ditch, channel, container, rolling stock, concentrated animal feeding operation or vessel from which pollutants are or may be discharged. The term "non-pooint source", while not defined by the Act, is considered to be the accumulated pollutants in the stream, in difuse runoff, and in seepage and percolation contributing to the degradation of the quality of surface and ground waters.

Whenever there is a point source discharge over a certain size, there must be a discharge permit issued, whether the operation be by government or by private party. The National Pollution Discharge Elimination System (NPDES) is the mechanism whereby these point source discharges are regulated and controlled. As has been pointed out above,

the permit must take into account the quality of water to be achieved or maintained in the receiving stream. If a discharge is to be made directly into a stream or water, both the effluent limitations and the water quality standards for the segment must be met.

> "In the case of publicly owned treatment works, the NPDES permit will provide for the type and amount of sewage which the treatment works can accept for treatment. It is readily seen that this can effect land use decision as to the type and amount of growth in the area served by such treatment works. If a treatment works violates terms of its permit, the state or EPA Administrator may restrict or prohibit new discharges into the treatment works." White, Impact of Federal Water Pollution Controls On Land Use Decisions, Res Gestae, August, 1976.

Some reviewers have stated that the Federal Water Pollution Control Act Amendments of 1972 are an admirably comprehensive piece of legislation.

> "It was designed to deal with all facets of recapturing and preserving the biological integreity of the nation's water by creating a webb of complex inter-related regulatory programs." United States v. Holland, 373 Fed. Supp. 665, 668 (M.D.Fla. 1974).

The Act provides simply that "the discharge of any pollutant by any person shall be unlawful." 33 U.S.C. §1311(a). Any addition of any pollutant to any navigable waters from any point source is a discharge of a pollutant. 33 U.S.C. §1362(12).

Pollutant, in turn, is defined as any dredged spoil . . . rock, sand, celler dirt and other wastes generally

considered pollutants. A NPDES permit is required, under the act, before any discharge of a pollutant is made from a point source into the navigable waters. The act broadly defines navigable waters to encompass "all waters of the United States." 33 U.S.C. §1362(7).

In holding that the "simple" act of filling in certain non-navigable man made mosquito canals, which ultimately emptied into waters of the United States, was within the purview of control under the 1972 Amendments requiring the prior issuance of a permit, Judge Krentzman said:

> "In §102c, the Administrator of the Environmental Protection Agency is authorized to make grants for basin studies to provide comprehensive water quality control plans for a basin. 'Basin' in that section is defined to include 'rivers and their tributaries, streams, coastal waters, sounds, estuaries, bays, lakes, and portions thereof, as well as the lands drained thereby.' 33 U.S.C. §1252(c).
>
> ". . . What these sections do reveal is a sensitivity to the value of a coastal breeding ground. Composed of various interdependent ecological systems (i.e. marshes, mudflats, shallow open water, mud and sand bottoms, beach and dunes) the delicately balanced coastal environment is highly sensitive to human activities within its confines. . . . Congress realizes that coastal ecology is endangered by poorly planned development." United States v. Holland, supra, at pages 674, 675.

ARTICLE X

JURISDICTION AND LEGISLATION RELATING TO COASTAL ZONE

A. INTRODUCTION TO TOPICAL DISCUSSION:

The following are summaries of federal and state legislation, and federal and state agencies. It is through an understanding of the legislation that one may gain a new picture of programs affecting the coastal zone. Agency powers, in and of themselves (e.g. power to condemn, to abate, to levy fines, to make grants, etc.) are not areas easily understandable until one can view them integrated into a particular program.

For example, in connection with the program to reduce air pollution, the Environmental Protection Agency is more comprehensible when it is viewed as an actor in a national air quality program than when viewed through a listing of its specific powers. The Environmental Protection Agency has a program involving certain schedules, approval procedures, funding methods and arrangements of incentives and sanctions. It is in a program context that the following analysis is made and not in a powers context.

To generalize, we have viewed these matters as programs involving agencies rather than agencies exercising powers. The present or potential impact on the resources of the coastal zone appears to be better understood through an

assessment of programs involving agencies. This appears to hold true for areas of air and water pollution, waste treatment, federal assistance to fisheries, conservation of certain land and wildlife resources, development of recreational opportunities and boating safety. This form may hold less true in areas such as energy and river and harbor projects where a dominant agency, the Nuclear Regulatory Commission (NRC) and Corps of Engineers, exercise powers on a case by case or a project by project basis. Even in these latter areas, a programmatic approach may emerge through legislative provisions calling for a nationwide survey of potential nuclear power plant sites and the intergration of Corps of Engineer dredge and fill powers into the Water Pollution Control Amendments of 1972.

ARTICLE X

B. ENERGY

No state

1. Federal Energy Reorganization Act
42 U.S.C. 5801, et seq.

Overview:

The Act abolished the Atomic Engergy Commission (Cf. Sec. 5814(a)), and created two agencies (ERDA, NRC) between which to divide former AEC powers.

Energy Research and Development Administration (ERDA):

EREA is to be a comprehensive research and development agency. It received by way of transfer not only the AEC's R&D powers, but also Department of Interior functions concerning coal and fosile fuel energy research and National Science Foundation functions concerning development of solar and geothermal power. Sec. 5814. (note: the present Congress has approved large sums for solar ($248,000,000.00) and geothermal ($53,000,000.00) research. Congressional Quarterly, Weekly Report, July 3, 1976, page 1958).

Nuclear Regulatory Commission (NRC):

The NRC received all licensing and regulatory functions of the AEC. Sec. 5841 (f) and (g). The AEC was authorized under Sec. 2833 of Title 42 to issue licenses for the ". . . manufacture . . . (or) use . . ." of "utilization facilities for industrial or commercial purposes." 42 U.S.C. 2133 (a). A "utilization facility" is one which is capable of using special nuclear material "in such manner as to affect the health and safety of the public". Sec. 2014 (c). "Each such license shall be issued for a specified period as determined by the Commission . . . but not exceeding 40 years." Sec. 2133(c)

This bare grant of authority is spelled out in later sections of the AEC legislation. AEC control over "utilization facilities" is divided into two stages. The AEC may grant an initial construction permit to a person submitting an application for the construction of a "utilization facility." Sec. 2235. Upon completion of construction, the AEC may issue an operating license to the applicant. This permit-license distinction gives the AEC a double review. Once at the beginning and once at the end of the lengthy construction pro-

cess of nuclear power Centers. Under this system, applicants can get pre-construction indication that their application is acceptable to the AEC. Cf. Sec. 2235. However, the final licensing process makes less arduous demands on the applicants in that hearings are not automatically required at this licensing stage if they have been held at the construction-permit stage. Sec. 2239. In fact, hearings appear to be mandatory at the construction-permit stage. Sec. 2239. Nevertheless, hearings are required even at the final licensing stage, if requested "by any person whose interest may be affected." Sec. 2239.

Licenses may be revoked by the AEC (NRC) when any "conditions" are "revealed . . . which would warrant the Commission to refuse to grant a license on an original application." Sec. 2236.

Site Survey:

The NRC is authorized to make and to keep updated a national survey of possible "nuclear energy center sites". Sec. 5847(a). The survey is to be conducted "in cooperation with other interested federal, state and local agencies".

Summary of Federal Legislation

2. Federal Energy Administration Act of 1974
(15 USC 761 to 786)

Creation and termination

The Act transferred a number of energy-related authorities from other agencies (cf. sec. 765) and vested them in a Federal Energy Administration (FEA), an independent agency in the Executive branch. (cf. sec. 762.) The FEA was initially scheduled to terminate on June 30, 1976, but an eighteen month extension has been approved by House and Senate conferees. (Cf. Congressional Quarterly Weekly Report, Aug. 7, 1976, p. 2111.)

General Function of FEA

In general the FEA was created for "the management of energy and natural resources policies and peograms." (cf. sec. 774(a).) Through its Office of Policy and Analysis it seeks to integrate "all program, policy, legislative initiatives to establish a comprehensive national energy policy." (U.S. Government Manual, 1975-76, p. 476)

Specific Powers

The FEA possesses the following specific powers, among others:

1. Power "to promote stability in energy prices to the consumer" and to "prevent unreasonable profits within . . .the energy industry." (sec. 764(b)(5))

2. Power to design and implement energy-resources distribution programs. (U.S. Gvmt Manual, 1975-76, p. 477)

3. Power to develop and oversee the implementation of energy conservation programs. (sec. 765(b)(7))

4. Power to provide the States with technical assistance in dealing with energy problems. (sec. 779(b)(1))

5. Further authorities of the FEA with respect to power plants are noted in the summary of the Energy Supply and Environmental Coordination Act of 1974. (15 USC 791ff.)

Summary of Federal Agencies

3. The Federal Power Commission (FPC) and the licensing of fossil plants

The basic FPC authority

The chief licensing clause of the Federal Power Act (16 USC 791a to 823) extends FPC licensing powers over the construction and operation of "project works" for the "development of power". (sec. 797 (e)) The definition of "project" in sec. 796 suggests that the law's intent was to confine the term, and along with it the FPC construction-licensing power, to hydroelectric projects, and this has indeed been the longstanding interpretation of the FPC itself.[1]

The interstate commerce rationale

Another clause of the Act related to the licensing of power plant construction has been construed liberally, but not so liberally as to extend FPC licensing powers over fossil plants: section 817 provides that "a dam or other project works" in or along a non-navigable stream subject to the Federal commerce power (generally by reason of flowing into a navigable stream) does require an FPC construction license if the FPC finds that "interstate or foreign commerce would be affected by such proposed construction."

In a 1965 case, the U.S. Supreme Court held that a narrow construction of the phrase "interests of interstate . . . commerce" was to be rejected:

> "Plainly the provision does not require a license only where 'the interests of interstate . . . commerce on navigable waters would be affected.'"[2]

In other words, effects on interstate commerce in all its aspects, not merely in its navigation aspects, would require an FPC license for the construction of a power project in that class of projects envisioned by section 817 and the Act in general. However, fossil plants were held by the Court not to fall within this class of projects, for the original Federal Water Power Act, of which section 817 was a part, was concerned "particularly ((with)) the power potential in water."[3] Thus, in spite of the broad inter-

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[1]Cf. Chemehuevi Tribe of Indians v. FPC, 489 F.2d 1207 (D.C. Cir 1973)

[2]FPC v. Union Electric Company, 381 US 90, 14 L Ed 2d 239, 244 (1965)

[3]FPC v. Union Electric Company, 14 L Ed 2d 239, 252

The interstate commerce rationale (cont.)

pretation given the interstate commerce rationale of section 817, the court could stop short of extending FPC licensing authority to fossil plants:

> "In relation to the central concern of the Act, the distinction between a hydroelectric project and a steam plant is obvious and meaningful, although both produce energy for inter state transmission."[4]

Indirect Federal Influence

A 1973 case, in the course of rejecting a strong argument that FPC construction-licensing power should extend to fossil plants, noted that "there is no comprehensive federal legislation governing the siting or operations of fossil-fueled power plants."[5] Federal influence on the siting and construction of fossil plants is exercised indirectly through air and water pollution legislation and through the Rivers and Harbors Act.[6]

Regional Councils

The FPC is also empowered under section 824a (a) to further the voluntary interconnection and coordination of "facilities for the generation, transmission, and sale of electric energy." This coordinating power extends to thermal as well as hydroelectric plants, and is put into effect through nine regional Electric Reliability Councils.[7] Though largely dependent on industry cooperation and chiefly directed towards the availability of an abundant supply of electricity, this coordinating role of the FPC may influence siting decisions.

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[4]FPC v. Union Electric Company, 14 L Ed 2d 239, 252

[5]Chemehuevi Tribe of Indians v. FPC, 489 F.2d 1207, 1233 (D.C. Cir. 1973)

[6]Ibid.

[7]Journey, Power Plant Siting--A Road Map of the Problem, 48 NOTRE DAME L. REV. 273, 283 (1972)

4. Energy Supply and Environmental Coordination Act of 1974 (15 USC 791 to 798; 42 USC 1857c-10; and elsewhere)

The Act seeks to accomplish, where feasible, the substitution of coal for natural gas and petroleum products as the chief fuel of major fuel burning installations. This substitution requires the coordination of certain EPA and FEA powers.

Powers of the FEA

1. With respect to power plants the FEA is required, and with respect to other "major fuel burning installations" the FEA is authorized, to prohibit the burning of natural gas or petroleum products as a primary energy source. (15 USC 792(a)) Authority to issue such prohibition-orders was initially set to expire June 30, 1975, but was extended by Public Law 94-163 to June 30, 1977. (Cf. 15 USC 792 (f) (1)) Such prohibitions are conditioned on considerations of proper equipment (15 USC 792(a)), practicality, coal-availability, and EPA-certification. (15 USC 792 (b) (1) and 792 (b) (3) (B)) The EPA-certification is discussed below.

2. The FEA is also empowered by the Act, subject to certain conditions, to require that power plants and other major fuel burning installations in the early planning process "be designed and constructed so as to be capable of using coal as ((a)) primary energy source." (15 USC 792(c))

3. The FEA is also authorized to allocate coal so as to further the purposes of the Act, with the proviso that low sulfur coal be distributed on a priority basis to areas where it is most required by considerations of public health. (15 USC 792 (b) and 793(a))

Role of the EPA

The EPA is required by the Act to grant a compliance date extension, on certain conditions, to any source issued the FEA prohibition discussed in the preceding section. (42 USC 1857 c-10(c)(1)(A)) A source receiving such an extension "shall not, until January 1, 1979, be prohibited, by reason of the application of any air pollution requirement, from burning coal which is available to such purpose." (1857c-10(c)(1))

A source receiving such an extension is nevertheless subject to certain EPA-issued limitations and requirements, particular to that source, which are necessary to avoid pollutant concentrations exceeding national primary ambient air quality standards. (1857c-10(d)(2)(A)) And for each such source, the EPA must certify the earliest date on which the source will be able to comply with these particular limitations and requirements. (1857c-10(d)(2)(B)) Only upon this date does an FEA prohibition-order to such a source become effective. (15 USC 792 (b)(3)(B))

ARTICLE X

C. POLLUTION AND WASTE

Summary of Federal Legislation

1. Clean Air
Act of 1970: Subchapter I
(42 USC 1857-1857f)
(Pub. Law 91-604, Dec. 31, 1970)

Types of Standards

The act seeks to regulate pollution sources, both stationary (1857c-6) and mobile (subchapter II), and pollutants themselves, both those hazardous per se (1857c-7) and those having adverse effects at certain levels or under certain conditions (1857c-3,4). All of these objects of control, except pollutants from moving sources, are dealt with in this summary.

The first step in regulating each of these three objects is the determination of standards. Standards pertaining to pollutants adverse at certain levels are primary and secondary ambient air quality standards. For each pollutant on a growing list (1857c-3(a), and 1857c-4(a)(1)), a primary and secondary standard is promulgated indicating two levels of that pollutant's presence in the air: beneath the first level public health is protected, and beneath the second the public welfare is protected. (1857c-4(b)(1) and (2).

Standards pertaining to hazardous pollutants are emission standards. Such standards involve the direct measurement of emissions from stationary sources. 1857c-7. (Note that there may, of course, be emission standards for pollutants other than those hazardous per se.)

Standards pertaining to new stationary sources (buildings, installations, etc.) are standards of performance. They reflect the best overall emission control which new stationary sources can achieve by using the best available and cost-feasible emission reduction systems. 1857c-6(a)

The state's role
in fashioning and implementing standards

The power to promulgate national primary and secondary ambient air quality standards is given to the Administrator of the EPA by 1857c-4(a)(1)(B). And the power to promulgate standards of performance and emission standards for hazardous pollutants is given him by 1857c-6(b)(1)(B) and 1857c-7(b)(1)(B). However, by 1857d-1 a state or political subdivision thereof is generally empowered to adopt emissions standards and other pollution control requirements provided they are not less stringent than Federal standards and limitations in effect under 1857c-6 (standards of performance) and 1857c-7 (emissions standards for hazardous pollutants).

The state's role
in fashioning and implementing standards (cont.)

AIR QUALITY STANDARDS: Each state is required to adopt and submit to the Administrator's review a plan or plans for the implementation, maintenance, and enforcement of national primary and secondary ambient air quality standards, within each "air quality control region" (1857c-2) in the state. Note that implementing air quality standards entails state's setting emission standards. 1857c-5(a)(2)(B)

EMISSION STANDARDS AND STANDARDS OF PERFORMANCE: Each state may develop and submit to the Administrator's review a procedure for implementing and enforcing emission standards and standards of performance. 1857c-6(c)(1) and 1857c-7(a)(1).

Federal Intervention

AIR QUALITY STANDARDS: If a state neglects violations of its implementation plan in particular cases, the Administrator of the EPA may, after 30 days notice to the state, issue orders or bring civil suits to remedy the violation. If a state generally neglects to enforce its implementation plan, the Administrator may, after 30 days notice to the state, inaugurate a "period of federally assumed enforcement." 1857c-8(a) (1) and (2).

EMISSIONS STANDARDS AND STANDARDS OF PERFORMANCE: Whenever the Administrator learns of violations of these standards, he may at once issue orders and bring civil suits to remedy violations (1857c-8(a)(3); 1857c-6(c)(2); 1857c-7(d)(2).

Clean Air Act of 1970:
Subchapter I

Land-Use Implications:

STATE IMPLEMENTATION PLANS: 1857c-5(a)(2)(B) lists "land-use and transportation controls" among those measures by which states will meet primary and secondary air quality standards. Moreover, by 1857c-5(a)(4), state plans are required to show state authority "to prevent construction" of new stationary sources at locations where such construction will prevent attainment or maintenance of primary or secondary air quality standards.

STANDARDS OF PERFORMANCE: Violation of such standards by new stationary sources is declared unlawful by 1857c-6(e)

EMISSION STANDARDS: New stationary sources may not be constructed which in the Administrator's judgment will discharge hazardous pollutants in violation of emission standards. 1857c-7(c)(1)(A)

2. Developments under the Federal Clean Air Act
AQMA's (Air Quality Maintenance Areas)
and "Indirect Sources"

I. Introduction

During the last four years a much increased concern with indirect air pollution relationships and their effect on clean air maintenance has emerged in EPA rulemaking and commentary. The event which in particular triggered this concern was an order entered January 31, 1973 by the Court of Appeals for the District of Columbia in NRDC v. EPA, 475 F. 2d 968. That order, and subsequent EPA response, are described in section II below, "Chronology." The full effect of this concern with indirect impacts on air quality maintenance are still to be seen, but may well include the application of "new source" review processes to a wider range of sources and a fuller utilization of the "land-use and transportation controls" which the Clean Air Act expressly mentioned as possible strategies for state attainment and maintenance of national air standards. (42 USC 1857c-5(a)(2)(B))

II. Chronology

Jan. 31, 1973: per curiam decision of the District of Columbia Circuit in NRDC v. EPA, 475 F.2d 968. The EPA Administrator was ordered to review state implementation plans[1] for their provisions for the maintenance of air quality standards beyond the deadlines set for the attainment of such standards. 475 F.2d 968, 971, 972

June 18, 1973: The EPA Administrator expanded 40 CFR 51.12 to require state implementation plans to identify areas "which, due to current air quality and/or projected growth rate, may have the potential for exceeding any national standard within the subsequent 10-year period." (40 CFR 51.12(e) as set forth at 38 Fed. Reg. 15834 ff.; emphasis added.)

June 2, 1975: Finding that Indiana had not made the area identification required by 40 CFR 51.12(e), the EPA Administrator designated air quality maintenance areas in the state. (40 Fed. Reg. 23753; 40 CFR 52.792) Porter and Lake counties were designated as the Indiana portion of the Illinois-Indiana-Wisconsin Interstate AQMA.

May 3, 1976: the EPA published extensive regulations governing state analysis of AQMA's in terms of projected emission and concentration of pollutants, and state preparation of AQMA plans on the basis of such analysis. (41 Fed. Reg. 18382 ff.; 40 CFR 51.41 to 51.63)

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[1] Cf. summary of Clean Air Act for description of state implementation plans.

II. Chronology (cont.)

May 10, 1976: Bethlehem Steel, Nipsco, and others had brought a suit against the EPA challenging the AQMA regulations of June 18, 1973 (cf. above) as unconstitutional and unauthorized by the Clean Air Act, and challenging on substantive grounds EPA's June 2, 1975 designation of Porter, Floyd, Marion and Vandergurg Counties in Indiana as AQMA's.[2] The court dismissed the challenge on the grounds that the matter in question was not yet ripe for review because the State of Indiana was still involved in an AQMA-study phase which has not yet resulted in the actual addition of any AQMA provisions to Indiana's implementation plan.

III. The Maintenace Approach

-The Problem

Construction of new facilities or structures may have a two-fold impact on air quality: first, the facilities themselves may directly emit pollutants into the air, and, secondly, they may indirectly stimulate an increase in the emission of pollutants from associated sources. This indirect pollution increase may result from the additional traffic drawn to the area of a new shipping center or sports complex (cf. EPA comments at 38 Fed. Reg. 9599, col. 2, 3rd full paragraph), from the higher load requirements placed on power and treatment plants by the expansion of an industrial plant (cf. EPA comments at 38 Fed. Reg. 15834, col. 3), or from "general urban and commercial development" associated with the construction of a major facility. (Cf. EPA comments at 38 Fed. Reg 6279, col. 2.) To meet this problem of indirect pollution impacts, EPA regulations have developed two methods

-New source review

Although pre-construction review of new sources was provided for from the beginning in state implementation plan requirements under section 110 of the Clean Air Act (cf. 42 USC 1857c-5 (a)(2)(D)), EPA regulations of June 18, 1973 expanded this review along two lines.

First, the review process was required to weigh the indirect pollution effects "resulting from mobile source activities" associated with the proposed new source. (40 CFR 51.18 (a))

Secondly, review was extended to the so-called "indirect sources", including sports complexes, airports, highways and roads, retail, commercial and industrial facilities. (40 CFR 52. 22) EPA regulations would have subjected proposed "indirect

[2]Bethlehem Steel v. EPA, 8 ERC 2114, 2115, 2116 (7th Cir., May 10, 1976)

III. The Maintenance Approach (cont.)

sources" to severe scrutiny with respect to their generation of motor vehicle traffic and would have prohibited construction where such traffic would lead to violation of national standards for carbon monoxide. (40 CFR 52. 22 (b) (4)) However, the emplementation of these regulations, and of other regulations for the management of parking supply has been subject to delays.[3] Clarification of the matter apparently awaits final action on Clean Air Act Amendments now pending in Congress.

-AQMA's and land-use implications

Regulations proposed by the EPA on April 18, 1973 would have placed the burden of air quality maintenance solely on the expanded new source review process discussed above. (Cf. 38 Fed. Reg. 9600f. 4/18/73) But in reaction to comments received concerning these proposals, the regulations actually promulgated by the EPA on June 18, 1973 made a vital addition to maintenance procedures, supplementing the source by source analysis of 40 CFR 50.18 with an analysis of the air quality impact resulting from generalized growth (cf. 38 Fed. Reg. 15834, col. 2): the identification of AQMA's and the preparation of AQMA plans was required. (Cf. 40 CFR 51. 12 (e) to (g) as set forth at 38 Fed. Reg. 15836.)[4]

The heart of the planning requirement lies in this sentence:

> "The AQMA plan shall include, as necessary, control stragegy revisions and/or other measures to ensure that emissions associated with projected growth and development will be compatible with maintenance of national standards." (40 CFR 51.40 as set forth at 41 Fed. Reg. 18388; emphasis added)[5]

The force of this sentence lies in the fact that "other measures" may necessarily include land-use controls for some AQMA's. Admittedly, the EPA Administrator has made it clear that the regulations do not impose Federal land-use controls and has entertained the hypothesis of an AQMA plan containing no land-use measures:

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[3]Cf. Energy Supply and Environmental Coordination Act of 1974, 42 USC 1857c-5 (c)(2)(C), and 40 Fed. Reg. 28064.

[4]Amendments of May 3, 1976 have moved this planning element to 40 CFR 51. 40 ff. and require a plan for only those AQMA's where the EPA Administrator finds such a plan necessary. (41 Fed. Reg. 18388)

[5]The period for which the plan was to ensure such compatibility was 10 years in the 51. 12 (g) version of the planning requirement (40 CFR 51. 12 (g)), but in the current amendment such period is left to the determination of the EPA administrator (40 CFR 51.52) Note, though, that the period to be covered by the analysis preparatory to the plan is 20 years. (40 CFR 51. 42)

III. The Maintenance Approach (cont.)

> "If a state submits a plan which insures maintenance of the standards solely through emission limitations and contains no land use or transportation measures whatever, EPA will approve it." (41 Fed. Reg. 18382, col. 3, 5/3/76)

But this hypothesis may not be a likely one for AQMA's subject to heavy growth pressures.

Local-Local Responsibility

States whose implementation plans must be revised to include an AQMA plan, may assign the responsibility for developing the AQMA plan to agencies other than pollution control agencies. (41 Fed. Reg. 18384, col. 1, 5/3/76) "Elected officials of affected local governments and reginnal planning agencies may petition the Governor to obtain responsibilities in the development of AQMA plans." (40 CFR 51.58 (a)(2) as set forth at 41 Fed. Reg. 18390)

Moreover, the expanded new source review process under 51.18 may also be carried on by agencies other than air pollution control agencies. (40 CFR 51.18 (e))

3. Developments under the Federal Clean Air Act: Non-Deterioration

Court Decision

In 1972 environmental groups challenged EPA regulations by which state implementation plans could allow the quality of air, presently purer than levels fixed by the national primary and secondary standards, to be degraded down to a point at which it would just satisfy national secondary standards. Presenting a brief legislative history, the court found that the degradation or deterioration of these "clean air areas" was contrary to the Clean Air Act, and that accordingly, the regulation in question was invalid.[1]

The decision was affirmed by the Supreme Court on June 11, 1973.[2] The Court was equally divided, one judge taking no part in the decision. No opinion accompanied the decision. Eighteen states filed or joined in briefs of amici curiae urging affirance; two states filed briefs of amici curiae urging reversal. Indiana was in neither group.

EPA regulations: classification of areas

On December 5, 1974, in response to the case just noted, the EPA issued regulations by which the "clean air areas" in each state (viz. those areas with air quality purer than national standards) should be designated as falling in Class I, II, or III. (39 Fed. Reg. 42510; 40 CFR 52. 21 (c)) In a Class I area only a very small increment in pollutant concentrations would be permitted. Increments from two to eight times larger would be allowed in Class II areas. And in Class III areas pollutant concentrations would be permitted to reach national ambient air quality standards. (40 CFR 52. 21 (c) (2))[3]

Land use implications

All "clean air areas" were initially to be ranked as Class II. (40 CFR 52. 51 (c)(3)(1)) States were invited to propose redesignations, subject to EPA approval. (52.51 (c) (3) (ii)) EPA commentary indicates that such redesignations were intended to relect each state's design for the location of growth and development within its boundary. This intent is evidenced, for

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[1] Sierra Club et al. v. Ruckelshaus, 344 F. Supp 253, 256 (D.C.D.C. 1972)

[2] Fri v. Sierra Club et al., 412 US 541, 37 L Ed 140, 93 S Ct 2770 (1973)

[3] The pollutants for which "clean air areas" are to be determined and Class I, II, or III designations are to be made are sulfur dioxide and particulate matter. Different measurement techniques are appropriate to other pollutants such as nitrogen oxides, hydrocarbons and photochemical oxidants. And these different techniques are claimed to be unworkable in "clean air areas" where "measured air quality data" is unavailable due to the minimal amount of monitoring occurring in such areas. (39 Fed. Reg. 42511, col 1)

Land use implications (cont.)

instance, in the following remark:

> "the Administrator continues to feel that a Class II increment should be compatible with moderate, well controlled development in a nation-wide context, and that large-scale development should be permitted only in conjunction with a conscious decision to redesignate the area as Class III." (Commentary accompanying regulations of December 5, 1974; 39 Fed. Reg. 42510, col. 3)

Standards for new sources

The regulations also provide that for all areas (rather than just for "clean air areas") in each state 18 categories of new or modified sources will be subject to an EPA-specified emission limitation for sulfur dioxide and particulate matter reflecting "best available" control technology. (40 CFR 51.21 (d)(2)(ii)) This represents an increase in stringency over the Clean Air Act, which required new sources to meet emission limitations reflecting "the best system of emission reduction which (taking into account the cost of achieving such reduction) the Administrator determines has been adequately demonstrated." (42 USC 1857c-6 (a) (1))

Present Status

Court challenges have delayed the implementation of the regulations. Moreover, the present Congress is debating the "non-deterioration" issue as part of its likely revision of the Clean Air Act.[4]

[4] Cf. the 6th Annual Report of the Council on Environmental Quality, p. 52; and discussion of Senate Bill 3219 (S 3219) at Congressional Quarterly Weekly, 7/31/76, p. 2101.

Summary of Federal Legislation

4. Federal Water Pollution Control Act Amendments of 1972 (33 USC 1251-1376)

Note: Throughout this summary "Administrator" refers to the Administrator of the Federal Environmental Protection Agency (EPA)

Status: The 1972 amendments extensively amended, reorganized, and expanded the Water Pollution Control Act, originally passed in 1948 and amended about a dozen times since then.

Standards and Types of Regulations:

WATER QUALITY STANDARDS prescribe, in general, the water purity levels necessary to protect the public health and welfare. Apparently, such standards may vary from water to water, depending upon the "designated uses" of the water involved. (sec. 1313 (c) (2)) Prior to the 1972 amendments, water quality standards were used quite directly, as their name implies, to determine when water quality had fallen below an acceptable level. 33 USC sec. 1160 (c) (5) Once this determination was made, a difficult causal question had to be faced: how establish conclusively that certain sources of discharges are in fact responsible for the water quality decline? Water quality standards are still required by the Act (cf. sec. 1313 in general), but they are to be used in conjunction with "effluent limitations."

EFFLUENT LIMITATIONS are a new sort of standard adopted by the 1972 amendments. These limitations are basically technology-installation requirements. The Act requires discharge sources to install the "best practicable" control technology by 1977 and the "best available" control technology by 1983. Sec. 1311 (b). Publicly owned treatment plants are held to less rigorous effluent limitations: they are not required to meet the "best practicable" standard until 1983. 1311 (b) (2) (B) and 1281 (g) (2) (A).

STANDARDS OF PERFORMANCE apply to new sources, i.e. new buildings, facilities, etc. from which there may be the discharge of pollutants. sec. 1316 (b) (1) (B) Like effluent limitations, standards of performance look directly to pollution reductions possible through technological alternatives. But standards of performance are more demanding: they reflect pollution-reduction achievable through the "best available" technology (the criterion used in the 1983 effluent limitations), and, since they apply to new sources, they are not modified and made more lenient, as effluent limitations may be, to reflect age of existing equipment or engineering problems involved with installation of control-technology. (cf. 1316(b)(1)(B), 1314 (b)(1)(B), and 1314 (b)(2)(B).)

Interaction of water quality standards and effluent limitations

Where a connection between water quality decline and specific sources can be identified, water quality standards are to be upheld, even if they require more stringent measures than are required by applicable effluent limitations. Cf. 1311 (b)(1)(C).

The state's role
in fashioning and implementing
standards

EFFLUENT LIMITATIONS AND STANDARDS OF PERFORMANCE:
Effluent limitations may be issued by the state, but they must satisfy the stringency requirements of the all important "guidelines" issued by the EPA. 1313(e)(3)(A) and 1314 (b). Standards of performance are promulgated by the Administrator.

Each state is invited to submit for EPA approval a program under which it will issue discharge-permits insuring compliance with effluent limitations and standards of performance. 1342 (b) and 1316(c). But where a state chooses not to submit such a program, or fails in the administration of such a program (1342 (c) (3)), provision is made for direct permit-issuance by the EPA administrator. (1342 (a)). Moreover, state-issued permits are subject to review and "veto" by the Administrator. 1342 (d)

WATER QUALITY STANDARDS:
The preparation and periodic revision of water-quality standards is the duty of the state. 1313 (a)(3)(A), 1313 (c). Where such standards, as applicable to navigable waters, are found to be inadequate, suitable standards are to be prepared by the Administrator. 1313 (c)(4)

Water quality standards appear to be implemented indirectly through through the enforcement of other standards, for example, the general effluent limitations of 1311 (b)(1)(A) and 1311 (b)(2)(A), as well as the "more stringent limitations" provided for in 1311 (b)(1)(C). These two classes of limitations are implemented through the permit system described in the preceding section of this summary. Another sort of standard, "maximum daily loads", also contributes to the indirect implementation of water quality standards: each state is required to identify waters where water quality standards will not be met by the mere implementation of effluent limitations. 1313 (d)(1)(A) For such waters the state is to determine the maximum daily load of certain pollutants that is able to be sustained without exceeding water quality standards. Implementation of these maximum load standards is apparently entrusted to the state by 1313 (d)(2) and 1313 (3)(3)(C).

Federal Water Pollution Control Act Amendments of
Control Act Amendments of 1972

Federal Control

Generally, the extent of such control has been indicated in the immediately preceding section. However, one section of the Act, sec. 1344 (generally referred to as sec. 404 from its place in the Public Law 92-500) has raised a large question of federal control. Sec. 1344 authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits "for the discharge of dredged or fill materials into the navigable waters at specified disposal sites." I will discuss the relation of this "404" power to state control in a separate memo, "Respective powers of the State and COE."

Land Use Implications

The full extent of FWPCA control over land use is manifest in sec. 1342 (b)(1)(C)(iii): even after issuance of a discharge permit, a source may be required, due to changed conditions, to terminate such discharge. If the state does not have authority to effect such terminations, then the permit system is not to be administered by the State but by the Administrator of the EPA. (1342 (b))

5. Areawide Waste Treatment
Management Plans
33 USC 1281-88

Status: These sections constitute sub-chapter II of the FWCPA Amendments of 1972.

Areawide Plans: Section 1288 (a)(2) (section "208" in the Public Law) requires the Governor of each state to identify the areas within the state which have "substantial water quality control problems." For each such area the governor is to appoint a single planning organization which is responsible for the preparation of an areawide waste treatment management plan, including:

a twenty year schedule of treatment works required in the area to meet municipal and industrial liquid (cf. 1292 (2)(A)) waste treatment needs. 1288(b)(2)(B)

Such plans are subject to the approval of the Administrator of the EPA (1288 b (3)

State and local regulatory powers under the plan:

The plan must establish a program to "regulate the location, modification, and construction of any facilities within such area which may result in any discharge in such area." 1288 (b)(2)(C)(ii) And the plan must provide procedures, including land use requirements, to control agricultural, mine-related, and construction-related "runoffs" contributing to water pollution. 1288(b)(2)(F-I)

The Plan and Federal Money

The EPA administrator is authorized to make grants to state, municipality, or interstate agencies for the construction of publicly owned waste treatment plants. 1281(g)(1) However, in areas for which a plan is in effect, no such grants may be made for any projects which are not in conformity with such plan. 1288 d.

Summary of Federal Legislation

6. Solid Waste Disposal
42 USC 3251-3259

Planning Grants: Authorizes the secretary of HEW to make grants to State, interstate, municipal and intermunicipal agencies for the development of areawide (3254a(b)(2)) plans for disposal of solid waste. 3254a(a)(2)

Construction Grants: The Secretary of HEW may make grants to help finance construction of solid waste disposal facilities, if:

A. a solid waste plan has been adopted and the proposed facilities are consistent therewith; and
B. the project advances the state of the recycling and disposal art. 3254b (c)

Summary of Federal Legislation

7. Spills of Oil and other Hazardous Substances
(33 USC 1321, as contained in the FWCPA)

This lengthy section of the Federal Water Pollution Control Act establishes several deterrence and prevention methods with a view to minimizing both the spillage of oil and hazardous substances and the damage resulting from spills which do occur.

Fines and other deterrences

Owners and operators of vessels, on-shore facilities, and off-shore facilities from which a non-recoverable substance, hazardous in any quantity, is discharged may be liable to large monetary penalties, running as high as $5,000,000 for vessels and $500,000 for on-shore and off-shore facilities. (sec. 1321 (b)(2)(B)) When oil and other hazardous substances of a recoverable nature are discharged, the monetary penalty is small (sec. 1321 (b)(6)), but the owner or operator may be liable for the costs of removing the discharged substance, up to a ceiling of $14,000,000 in the case of vessels and $8,000,000 in the case of on-shore and off-shore facilities.

The Act also provides for the establishment of a "National Contingency Plan" to hold equipment and personnel in readiness for the containment or removal of discharged oil and hazardous substances. (sec. 1321 (c)) (This plan is presently set forth at 40 CFR 1510.)

Preventive measures

The Act empowers the President to issue regulations requiring procedures and equipment directed towards the containment and elimination of discharges. (sec. 1321 (j)(1)) Civil fines may be imposed for failure to comply with such regulations. (sec. 1321 (j)(2)) (These regulations have been issued for vessels by the Coast Guard (33 CFR 155) and for on-shore and off-shore facilities by the EPA (40 CFR 112))

Summary of State Agencies

STATE

8. Environmental Management Board (EMB)
Stream Pollution Control Board (SPCB)
Air Pollution Control Board (APCB)

Interrelation of the three boards

A great deal of the authority to control air and water pollution in Indiana has been granted to the three boards which are the subject of this summary. The SPCB was created as an executive board by Act of 1943. (13-1-3-1) The APCB was created as an administrative board by Act of 1961. (13-1-1-3) The EMB was created as a state environmental quality board by Act of 1972. (13-7-2-1) Although the EMB is given a broad mandate to "evolve standards . . .to preserve, protect, and enhance the quality of the environment" (13-7-3-1), powers entrusted to the SPCB and APCB prior to the EMB-enabling legislation are to continue to be exercised by such agencies. (13-7-6-7) However, the EMB is empowered to coordinate the activities of the SPCB and APCB, and to review regulations adopted by the SPCB and APCB before such regulations can become effective. (13-7-2-9, 13-7-7-1(b))

Powers of the Boards

For purposes of this summary I have focused on powers of requiring and terminating permits, and powers of enforcing standards. Other powers, such as monitoring discharges or entering on private property for inspections, are not treated.

SPCB: A. Discharge permits
"No person shall discharge pollutants . . . into . . . the waters of the state . . . without a valid permit issued by the SPCB." (Indiana Administrative Rules and Regulations , 35-5237-1(a))

B. Construction permits
Certain projects cannot be undertaken without a SPCB construction permit: water pollution control facilities (Rules, 35-5236-1), sanitary land fill facilities (Rules, 35-5235-55), and, apparently, solid waste processing plants (Rules, 35-5235-46).

dredging?

C. Termination of permits
When changes in conditions require a reduction or elimination of previously permitted discharges, the SPCB may react by modifying or suspending permits. (Rules, 35-5237-21(b)(3))

D. Orders and Actions
The SPCB may issue cease-and-abate orders (13-1-3-9); after a hearing, it may order polluters to acquire equipment for the disposal and treatment of pollutants (13-1-3-5); and it may bring civil actions for the enforcement of its orders (13-1-3-11).

EMB
SPCB
APCB

E. Condemnation
Persons ordered by the SPCB to treat or cease discharging industrial and sanitary wastes are empowered, when it is necessary, to condemn land, if no dwelling house is located thereon.

APCB: A. Construction permits
No person shall construct or modify a stationary source without APCB approval, which is given only if the APCB is satisfied that state air quality regulations and Federal standards will not be violated by the source. (Rules, 35-5235-22(a) and (b))

B. Operation permits
Operation of a stationary source requires an APCB permit, to be renewed at least every four years, and granted only if the APCB is satisfied that state air quality regulations and Federal standards will not be violated by the source. (Rules, 35-5236-23(e) and (f))

C. Termination of permits
When changes in condition require a reduction or elimination of previously permitted operations, the APCB may react by modifying or revoking permits. (Rules, 35-5235-25; 13-7-10-5)

D. Orders and Actions
The APCB may enter whatever orders are necessary to abate a condition of air pollution (13-1-1-4), and "bring appropriate action to enforce its final orders (13-1-1-4 (A)(4)).

E. Note on extensiveness of regulations
"Sources of minor significance" are not required to get APCB permits. Examples:

1. Fuel-burning equipment in apartment buildings with four or less units, provided certain fuel and heat input conditions are also met. (Rules, 35-5235-24(a)(2))
2. Equipment used by farmers to dry grain.

EMB: Note: Powers listed in IC 13-7, the EMB-enabling legislation, are usually granted to "the EMB or an appropriate agency," namely, the SPCB or APCB. Therefore, powers granted under this verbal formulation in 13-7 may already have been partly or wholly in existence, as vested in the APCB or SPCB.

A. Construction and operation permits

1. Generally: no person shall construct or operate, "without prior approval of the Board or an appropriate agency ((viz, SPCB or APCB)), any equipment or facility . . . which may cause . . .pollution" (13-7-4-1 (f)).
2. In particular: EMB permits are required for the construction of public water supply facilities (Rules, 35-5235-32), and for the construction and operation of nuclear powered generating facilities. (13-7-9-1).

EMB
SPCB
APCB

B. Discharge Permits
IC 13-7-5-5 empowers "the board or agency" to prescribe procedures for the administration of a system of permits for "the discharge of any contaminant." (underscoring mine) IC 13-7-10-3 empowers "the board or an appropriate agency" to provide by regulation for the issuance of permits for "the discharge of any contaminants into state waters." (underscoring mine) Question: does 13-7-5-5 empower the EMB or APCB to require permits for the discharge of contaminants into the air? A discharge permit system seems to admit of stricter control over permitees than does an operation permit system, inasmuch as a single building discharging contaminants at several points might need only one operating permit but several discharge permits. (35-5237-4(f))

C. Orders and Actions
The enabling statute for the EMB (13-7) allows the board or an agency (viz., the SPCB or APCB) to issue cease and desist orders, and corrective-action orders. The latter orders may require the posting of a performance bond. (13-7-11-5)

D. Suspension of permits:
Any permit issued under the authority of 13-7 may be revoked on the grounds of a change in conditions requiring that a discharge be eliminated, or for any other cause "which establishes in the judgment of the board or agency that continuance of the permit is not consistent with the purposes of ((13-7))." (13-7-10-5)

Role of Local Governments

APCB: Both the enabling legislation (13-1) and the APCB regulations leave in force ordinances of local governmental units which establish air pollution requirements of a stringency equal to or greater than the requirements adopted by the APCB. Nor is any limitation placed on the power of local governmental units to enact such requirements in the future. (13-1-1-10) County ordinances, however, may not include those municipalities which have their own ordinances. (13-1-1-10(b)) And within an air quality basin, cities, towns, or counties may join in a common administration of their air pollution programs. (13-1-1-10(c))

Moreover, according to an APCB regulation, "duties" otherwise entrusted to the APCB may be delegated to local governmental units which have air pollution ordinances. (Rules, 35-5235-27) Whether the term "duties" includes the APCB's permit issuance functions or only its abatement functions is not clear from the regulation.

EMB
SPCB
APCB

Role of Local Governments (cont.)

EMB: The EMB is to encourage local governmental units to develop standards for air and water pollution meeting minimum state standards. (13-7-15-2) Moreover, where local governmental units have not developed plans for certain environmentally important facilities (water supply, waste water treatment, solid waste disposal), the EMB, after a hearing, may order the formation of regional water, sewage, air or solid waste districts. (13-7-15-2)

SPCB: The SPCB system of permits for discharges into water, once approved by the Federal EPA as "official" for purposes of the "national pollutant discharge elimination system" (NPDES), apparently must be state-adminstered and thus appears not to be delegable to local governmental units. Cf. FWCPA 33 USC 1342(b), where one finds the phrase "the ((permit)) system which it ((the state)) proposes to establish and administer under state law." (Underscoring mine) And note that whereas permits for pollution control facilities (Rules, 35-5236-1(a)) and for sanitary landfill facilities (Rules, 35-5235-55), as well as pre-NPDES discharge permits (Rules, 35-5237-1), might be issued "by the agency ((SPCB)) or its designated agent" (underscoring mine), the formulation of the NPDES permit system mentions only the "agency" as a permit-issuer and makes no mention of any "designated agent." (Cf., for example, Rules, 35-5237-4(a).)

EMB
SPCB
APCB

State Response to Federal Pollution Legislation

APCB: The APCB is the state air pollution agency for purposes of the Federal Clean Air Act. (13-7-2-10)

APCB Regulations explicitly adopt certain Federally established standards:

PERFORMANCE STANDARDS: Particulate-emissions from the combustion of fuel by new stationary sources must satisfy EPA standards. (Rules, 35-4604-4(sec. 3)) And a 1974 amendment to Rules, 35-4604-3(sec. 5) requires more comprehensively that all new sources (and not merely those new sources emitting pollutants directly from fuel-combustion) comply with Federal "performance standards," where applicable. (These standards are in 40 CFR part 60.)

AIR QUALITY AND EMISSION STANDARDS: In regulations 35-4604-13 to--17, the APCB has set air quality standards (for certain pollutants) and emission standards necessary for achievement of the air quality standards. The relation of these state-established air quality standards to the air quality standards to be established by the Federal EPA (cf. 42 USC 1857c-4(a)(1)(B)) is not explicitized, but it appears from the opening paragraph of Rules, 35-4604-13 that the state standards are at least as stringent as the Federal. That paragraph indicates that state emission standards for sulfur dioxide are set at the level necessary to secure compliance with the "federal ambient air quality standards" for sulfur dioxide. The same compliance is not explicitly noted with respect to emission standards established for other pollutants, but perhaps an intention of such compliance may be presumed inasmuch as these other standards were established in regulations adopted approximately one month after Rules, 35-4604-13, and inasmuch as these later regulations lacked the introductory, didactic paragraph which allowed Rules, 35-4604-13 to treat of the relation between state emission standards and Federal air quality standards.

SPCB: The SPCB is the state water pollution agency for purposes of the FWPCA. (13-7-2-10) The SPCB's compliance with the directives of the FWCPA amendments of 1972 is manifest in SPCB regulations. The state-administered permit system described at Rules, 35-5237-2 is explicitly set forth as being established in pursuance of the National Pollutant Discharge Elimination System (NPDES) called for by sec. 402 of the FWCPA (33 USC 1342). Moreover, state-issued NPDES permits must contain conditions to insure compliance with the effluent limitations called for by 33 USC 1311 and 1312, with standards of performance established by the Administrator of the EPA (33 USC 1316), and with other standards and limitations provided for in the FWCPA.(Cf. Rules, 35-5237-16.)

EMB
SPCB
APCB

Inter-agency relations (state and Federal)

WPCB: Under the NPDES permit system, the WPCB is required to prepare a public notice of each completed permit and give it to Federal and state fish and wildlife agencies (Rules, 35-5237-7(a)(4)), as well as to "public health agencies" which may adminster certain requirements pertaining to the proposed discharge. (Rules, 35-5237-10(e)) Moreover, if the proposed discharge will take place into navigable water, notice must also be given to the District engineer of the Army Corps of Engineers. (Rules, 35-5237-10(c))

9. Illinois - Indiana Air Pollution Control Compact
Summary of Interstate Agreements
I.C. 13-5-7-1

By an Act of 1965 Indiana ratified a compact made with Illinois whereby an interstate air pollution control commission was established and empowered to identify interstate air pollution problems, particularly problems involving the origin of pollution in one state with consequent harm to health or welfare in the other state. The compact was empowered to recommend corrective measures to state and local Air Pollution Control agencies, and, in the event that six months should pass without sufficient corrective action occurring, to issue orders upon the person, corporation or municipality causing or contributing to the pollution. For the enforcement of such an order, the Commission was authorized to bring an action in "any court of competent jurisdiction."

NO STATE

ARTICLE X

D. RECREATION AND CONSERVATION

Summary of Federal Legislation

1. Fish and Wildlife Act of 1956 (as amended)
16 USC 742a to d, 742 e to j

The Act establishes a fisheries loan fund, out of which loans may be made on certain conditions for financing the purchase, construction, etc. of commercial fishing vessels or gear. (sec. 742 (a), (c)) The fund is presently scheduled to cease to exist on June, 30, 1980. (742 c) It is administered by the National Marine Fisheries Service in the Deaprtment of Commerce. (Cf. 50 CFR 250)

2. State Commercial Fisheries
Research and Development Projects
16 USC 779-779f

Summary: States are invited to draft plans for projects developing fishery resources and submit such plans to the Secretary of the Interior. Projects approved by the Secretary are eligible for up to 75% federal funding (779d (a) and (b)). Work needed to complete such projects is to be performed under the "direct supervision" of the State agency through which the plan was submitted. 779e.

3. Anadromous and
Great Lakes Fisheries
16 USC 757a-f

The Secretary of the Interior is authorized to fund up to 50% of state projects intended to conserve and develop "the fish in the Great Lakes that ascend streams to spawn." 757a(a). The Act provides an incentive to interstate cooperation, by authorizing Federal funding up to 60% for fish-development programs into which states having a common interest enter jointly. 757a(c

In accordance with any such funding agreements, the Secretary is authorized to make recommendations regarding the management of waters involved in such agreements, and to acquire lands by purchase, lease, or exchange. 757b(5) and (6)

4. Fish Restoration and Management Projects
16 USC 777 to 777k (1950)

Types of Projects

The Act authorizes the Secretary of the Interior to financially assist the states in the establishment and maintenance (sec. 777g) of fish restoration and management projects, including restocking programs (sec. 777a (c)) and the improvement of areas of land and water for the breeding, hatching, and feeding of fish. (7777a (d)) The land-acquisition (through purchase, lease, or condemnation) necessary for these "improvements" may also be assisted financially under this act. (777a (d))

The Act seems directed towards the aid of sport fishing. Section 777a appears to limit eligible projects to those involving "species of fish which have material value in connection with sport or recreation." And the moneys appropriated for purposes of the Act are to come from taxes on the rods, reels, and other equipment of the sport fisherman. (sec. 777b) However, the Act also appears to establish one procedure under which other-than-sport fisheries may be assisted. (Cf. the following section of this summary.)

State action necessary to gain financial assistance

To receive aid, the state may follow one of two methods. It may submit to the Secretary of the Interior a detailed statement of a particular proposed restoration project. Or it may submit a "comprehensive fish and wildlife resource management" plan directed towards fostering these resources for the economic and recreational enrichment of the people. (777e (a)(1) and (2)) If a state submits such a plan, "then the term 'project' may be defined for the purpose of this chapter as a fishery program, all other definitions notwithstanding." (sec. 777e (b)) This special redefinition of "project" suggests that funding under the Act might be available for projects integrated into a "comprehensive plan" which were concerned with commercial as well as sport fisheries.

5. Great Lakes Fisheries Act of 1956
16 USC 931 to 939c

Lamprey control

The Act serves to implement the Convention on Great Lakes Fisheries, signed by the United States and Canada on September 10, 1954, and directed towards the control of lampreyes in the Great Lakes. The Convention provided for a Great Lakes Fishery Commission, the U.S. members of which are authorized by this Act to:

A. acquire real property by "purchase . . . condemnation, or otherwise" (sec. 935 (a));

B. construct and operate lamprey control projects in compliance with the Convention (sec. 935 (b)).

Role of States

No grants-in-aid to the States are authorized by the Act, but project construction and operation may be contracted out to States by the U.S. members of the Commission. (sec. 935 (c)). Moreover, notice of proposed projects must be sent to the Governor of each Great Lake State for his "consideration." (sec. 939)

Current status

As of January 1, 1976 the Convention was still in force.[1]

[1] Treaties in Force: A List of Treaties and other International Agreements of the U.S. in Force on January 1, 1976, Dept. of State Publication 8847.

6. Fish and Wildlife Coordination Act
16 USC 661 to 666c

Consultation with USFWS

The Act requires that the Department of Interior (through the Fish and Wildlife Service) and the state agencies for fish and wildlife be consulted with respect to projects impounding, diverting, or otherwise modifying the waters of "any stream or other body of water," when such projects are undertaken or licensed by Federal agencies. (sec. 662) The comments made by the Interior Department and the state fish-wildlife agency regarding the wildlife conservation and development aspects of such projects are to be integrated into the engineering reports submitted to Congress or to any Federal agency with power to authorize the project. (662 (662 (b))

Project modifications

Several provisions of the Act bear on the implementation of the fish and wildlife recommendations made through the process described above:

A. Federal agencies are authorized to modify water-control projects to include measures for wildlife conservation. Allocations of costs between the substantive project and the attached conservation project differ depending on whether the conservation measure is directed chiefly towards mitigation of damage to wildlife or towards actual wildlife improvement. (662 (c))

B. Section 663 (a) requires that in connection with water control projects undertaken by any department or agency of the U.S., provisions shall be made for the use of such projects and lands and waters associated therewith for the conservation and management of wildlife.

C. Section 663 (b) authorizes the Federal agency constructing the water-control project to acquire, in connection with the project, properties for the specific purpose of wildlife conservation and development, on the proviso that such acquisitions require Congressional approval.

Relation of the Act to the NEPA

It has been held in several cases that "compliance with the National Environmental Policy Act is also a de facto compliance with the Fish and Wildlife Coordination Act.[1] The Court stated in Environmental Defense Fund v. U.S. Army Corps of Engineers that "if defendants comply with the provisions of the latter act (NEPA) in good faith, they will automatically take into con-

[1]Cape Henry Bird Club v. Laird, 359 F. Supp 404, 418 (D.C. Va 1973)

Relation of the Act to the NEPA (cont.)

sideration all of the factors required by the Fish and Wildlife Act and it is not reasonable to require them to do both separately."[2]

However, continued Congressional interest in the Fish and Wildlife Coordination Act would indicate that it has not been completely superseded as a coordinative mechanism and as a grounds of litigation. Two bills were introduced in the 93rd Congress which would have amended the Act to expand the consultation requirements noted above and to give any citizen a right of civil action to secure compliance with the Act.[3]

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[2] 325 F. Supp. 749 (E.D. Ark. 1971)

[3] Cf. H.R. 10651 (93rd Cong., 1st Session), H.R. 14527 (93rd Cong., 2nd Session)

7. National Wildlife
Refuge System
16 USC 668dd to ee

Summary: The National Wildlife Refuge System is a collective name applied to various categories of areas (wildlife ranges, waterfowl production areas, etc.) which are administered by the Secretary of the Interior. 688dd(a)

The Secretary is authorized to acquire and add lands to the system in several ways:
- through exchange of lands already held;
- through the granting of rights to remove certain products from lands in the system;
- through payments of cash. 688dd(2) and (3)

The Secretary may permit various public uses within the System (688dd(d)) and, at a price, may grant easements for powerlines, pipelines, roads, etc., both to governmental agencies (Federal, State, or local) and to private individuals.

Summary of Federal Legislation

8. Water Bank Program
for Wetlands Preservation
16 USC 1301 ff.

Planning: Soil and Water Conservation Districts are to prepare plans identifying certain wetlands in the District, especially those which are important for the nesting and breeding of migratory waterfowl. 16 USC 1301
It appears that the plans will specify certain conservation and development practices appropriate to the designated wetlands. 1303 (3)

Agreements with owners: The Secretary of Agriculture is authorized to enter into ten year, renewable agreements with owners or operators of the designated areas under which they undertake to seek to preserve the "wetland character" of those areas, both by refraining from drain, fill, or agricultural activities thereon and by undertaking certain conservation practices. 1303(2) and (3). The secretary shall remit to participating owners and operators an annual payment at a rate which both reflects land and crop values (1301) and provides sufficient compensation to encourage participation by eligible owners and operators. sec. 1304

9. Endangered Species Act of 1973
16 USC 1531-1543

Prohibited Acts:

The Secretary of the Interior, with the aid of the Secretary of Commerce, is to prepare and keep updated a list of endangered species and a list of threatened species. (sec. 1533) "Species" includes fish, wildlife and plants. (1532(11))

It is declared unlawful for any person to take (kill, capture, etc.), import, or sell in interstate and foreign commerce any species of fish or wildlife appearing on the list of endangered species. (1538(a)) It is also unlawful for any person to ship or sell in interstate and foreign commerce or to import any species of plant listed as endangered. As regards threatened species, regulations are to be issued on a species by species basis. (1533(d))

Subject to certain emergency provisions, the general "taking" prohibition (1538(a)(1)(B)) does not apply within any State which the joins the Secretary in a "cooperative agreement" establishing particular "conservation programs" for endangered and threatened species resident within the State. (1535(g)(2))

Cooperation with the States

The Secretary will enter into a cooperative agreement with any State which has, inter alia, the "conservation programs" mentioned above and the authorities to acquire land or aquatic habitats. (1535(c)) If a State has entered into such an agreement, it is eligible to be financially assisted by the Secretary in the development of programs for the conservation of endangered and threatened species. (1535(d)) Such assistance may reach 66% of program costs (75% for programs proposed by two or more States which have entered jointly into an agreement with the Secretary.) (1536(d)(2))

Demands on other Federal Agencies

The Act makes no mention of the indirect dangers to various species which result from pollution and from land and water developments. However, all Federal agencies and departments are directed by the Act "to insure that actions authorized, , funded or carried out by them" do not critically jeopardize the existence or "habitat" of endangered and threatened species. (1536) There is no clause precluding application of this section to plant species. (Cf. also 1531 (c))

(cont. on next page)

Citizen Suits

Subject to certain limitations, any person may commence a civil suit on his own behalf in the U.S. District Court for the purpose of:

1. enjoining anyone (including U.S. and other governmental agencies) from violations of this Act or regulations issued thereunder;
2. compelling the Secretary to apply the prohibitions on "taking" of endangered and threatened species. (1540(g)(1))

Courts may award litigation costs and fees for attorneys and expert-witnesses to "any party." (1540(g)(4))

10. Marine Sanctuaries
16 USC 1431 to 1434

The Secretary of Commerce is authorized by this act to designate certain areas of the ocean waters or of the Great Lakes as "marine sanctuaries," when such a designation is necessary "for the purpose of preserving or restoring such areas for their conservation, recreational, ecological or esthetic" value. (sec. 1432 (a)) Note that these appear to be aquatic areas, and not combined aquatic-littoral areas.

Where such a designation would attach to waters "within the territorial limit of any state," the governor of the state has sixty days from the designation's publication to make objection, and no such area to which the governor objects shall be included in a marine sanctuary. (1432(b))

Once a sanctuary is designated, no activities may be permitted or licensed therein by any authority without certification from the Secretary of Commerce. (sec. 1432(f))

11. Outdoor Recreation Programs
16 USC 460L 1 to 22

I. Land & Water
Conservation Act of 1965
16 USC 460L 4 to 11

The Fund

The act authorizes the establishment within the U.S. Treasury of a land and water conservation fund, the annual income of which through FY 1989 is to be $300,000,000. (460L-5(c)) Congress is to make an annual appropriation from the fund, chiefly for the use of the Secretary of the Interior. (460L-6 to 9) Forty per-cent of the appropriation is for Federal recreation purposes (e.g., land acquisition within National Park areas), sixty per-cent for State recreation purposes. (460L-7)

Assistance to States

The Secretary of the Interior is authorized to assist states financially up to 50% of costs in:

1. the acquisition of lands and waters and interests therein for recreation purposes;
2. the development of recreational projects. (460L-8(e))

The State Plan

The acquisition and development projects mentioned directly above will be assisted by the Secretary only if they are in accordance with a State comprehensive plan. (460L-8(e)) This plan must evaluate the demands for recreation resources in the state and draft a program towards meeting those demands. (460L-8(d)) The Secretary may financially assist the preparation and maintenance of the plan. (460L-8(d))

12.
II. Federal Water Project
Recreation Act of 1965
16 USC 460L-12 to 21

The Basic Idea

Federal water projects undertaken for purposes of flood control, navigation, or power may afford opportunities for the development of recreation sites or for the enhancement of fish and wildlife. The Act intends that such opportunities be exploited. (460L-12)

The "Machinery"

Federal agencies undertaking water projects must give "full consideration" to the recreation and wildlife potential opened up thereby. (460L-12) Both prior to approval of the project and for a period of ten years after initial operation of the project, non-Federal public bodies may come forth and agree to administer project lands or waters for recreation or fish-wildlife purposes and partially to finance the "project-modifications" (cf. 460L-14(b)(1) for this term) entailed by such purposes. (460L-13(a), 460L-14(b)) The incentive extended to such bodies is that the Federal government will pay up to one half the cost of such modifications. (ibid.) However, after the ten year period just mentioned, project lands with recreation or wildlife potential may, subject to certain limitations, be utilized or conveyed by the agency with jurisdiction over the project in any way not incompatible with the general authority of the agency or the primary purposes of the project. (460L-14(b))

Non-application to Certain Projects

The Act does not cover the attachment of any recreation or wildlife developments to the following sorts of projects:

1. projects constructed under authority of the Watershed Protection and Flood Prevention Act (460L-17(c));
2. non-reservoir local flood control projects (460L-16(d));
3. beach erosion control projects (460L-16(d))

13. Fish and Wildlife Act (pertinent sections)
I.C. 14-2-1-1 to 14-2-10-1 (1969, 1973)

Lake Michigan Fisheries

The Act empowers the Director of the DNR to regulate and protect Lake Michigan fisheries in several ways.

A. The Director holds authority under the Act to issue commercial fishing licenses for those portions of Lake Michigan under Indiana jurisdiction. (14-2-7-11) License fees increase with the size and sophistication of gear or vessels used; and fees for commercial fishermen not resident in Indiana are substantially higher than fees for state residents. (However, the director may enter into an agreement with any neighboring state for the reciprocal waiver of non-resident licensing requirements with respect to fishing in "public water forming a common boundary line" between the two states." (14-2-7-24)

Licenses expire at the end of each year (14-2-7-12), and may be revoked by the director of the DNR at any time for failure to comply with the provisions of this Act or with other conditions attached to such license. (14-2-7-30)

B. Persons licensed to operate commercial fishing gear in Lake Michigan must submit a monthly report to the DNR Director itemizing amount of catch, gear used, locality fished, etc. (14-2-5-5)

C. The DNR director may close portions of Lake Michigan and other waters of the state to fishing when such closure is expedient for the "improvement and propagation of the wild animal population." (14-2-6-9) (For purposes of this act, the term "wild animal" includes fish.)

Cooperation with Federal Programs

Through the Act, the State of Indiana has assented to:

A. U.S. acquisition of lands and water in Indiana for migratory-bird reservations (14-2-8-2);

B. the conduct of fish-hatching in Indiana lakes and streams by the U.S. Fish and Wildlife Service (14-2-8-3);

C. state-federal cooperative wildlife (14-2-8-4) and fisheries (14-2-8-5) restoration projects.

(cont. on next page)

Endangered Species

A 1973 addition to the Act empowers the Director of the DNR to undertake the "management" of non-game species which without such management are in danger of failing to perpetuate themselves." (14-2-8.5.-2) "Management" includes the acquisition and administration of habitats (14-2-8.5-1 (d), 14-2-8.5-9), and the "total protection" of species or populations where appropriate. (14-2-8.5-1 (d)) The scope of "total protection" is not indicated in the Act. Note, however,
The scope of "total protection" is not indicated in the Act. Note, however,
that the Act does recognize pollution and other man-made factors as dangers jeopardizing the survival of certain species (14-2-8.5-1 (c)), and does call on the Governor to "encourage" other state agencies "to utilize their authorities in furtherance of the purposes of this chapter." (14-2-8.5-9 (c))

ARTICLE X

E. SHIPPING AND BOATING

Summary of Federal Legislation re:
SHIPPING

1. Ports and Waterways
Safety Act of 1972
(46 USC 391a: ship design, cargo, handling)

Summary: Subject to certain exceptions, no vessel shall carry specified liquid cargoes in bulk (subsec. 2), until it has been issued:

a. a certificate of inspection and a permit, attesting to its compliance with vessel-safety regulations established, under authority of this section (subsec. 3, 5)
b. a certificate of compliance attesting to the vessel's compliance with marine-environment-protection regulations established under authority of this act. (subsec. 6)

Such regulations are to be issued by the Secretary of the Dept. in which the Coast Guard is working (Transportation). (subsec. 3)
Violations may be met with civil penalties (fines), imprisonment, in rem proceedings, and injunctive proceedings. Moreover, the Secretary may deny entry into U.S. navigable waters to any vessels not in compliance with regulations issued hereunder.

Federal-State connections: Connections are, at best, hinted at in the requirement in subsec. 4 that "interested persons" be permitted an opportunity for hearing, when proposed regulations are published.

July 9, 1976
Summary of Federal Legislation re:
SHIPPING

Ports and Waterways
Safety Act of 1972
(33 USC 1221-1227; harbor safety section)

Summary: Secretary of Transportation is authorized , among other things, to:
-control vessel traffic in congested areas and hazardous circumstances (even to the point of restricting operations under hazardous conditions to vessels "which have particular operating characteristics." sec. 1221 (3) (iv))
-require pilots, even where state laws do not require them (sec. 1221 (5))
-establish controlled access waterfront areas. (sec. 1221 (8)

Note: I cited the above parts of sec. 1221 as containing the most extensive exercises of the federal reach.

Federal-state connections: sec. 1222 (b): states may prescribe higher standards than those which may be prescribed pursuant to this Act.
sec. 1224: state and local governments, as well as port and harbor authorities, to be given opportunity for consultation when Secretary prepares proposed rules.

2. Summary of Federal Legislation
Shoreline Erosion Control Demonstration Act of 1974
42 U.S.C. 1962d-5; P.L. 93-251, Title I, Sec. 43

Demonstration Projects:

This Act directed the Army Chief of Engineers to undertake a five (5) year program demonstrating various shoreline erosion control devices, "both engineered and vegetative". At least two demonstration sites are to be located in the Great Lakes. In the case of projects undertaken on non-federal land, the non-federal beneficiary is to assume 25% of construction costs and full operation and maintenance costs.

3. Summary of Federal Legislation
Federal Boat Safety Act of 1971
64 U.S.C. 1451 to 1489

Numbering System:

The Act requires "undocumented vessels with propulsion machinery" to have a number. Undocumented vessels are those which are not required to have a "valid marine document as a vessel of the United States". Sec. 1452(3). States may establish their own numbering system, but it must be approved as being in accord with a standard numbering system established by the Secretary of the Department in which the Coast Guard is operating. "A state with an approved system is the issuing authority" under this Act. Sec. 1467. Otherwise the Secretary is the issuing authority.

Revenue Implications:

A. A vessel is to be numbered by the issuing authority of the state "in which the veseel is principally used." Sec. 1466.

B. When the state is the issuing authority, it may impose terms and conditions for vessel numbering "which relate to proof of payment of state or local taxes." Sec. 1472.

C. The required "certificate of number" (a pocket size document) shall not be valid for more than 3 years. Sec. 1469.

State Safety Programs:

The Act authorized incentive grants to the states for the establishment and administration of boating safety programs. Sec. 1476, 1477. Programs are subject to acceptance by the Secretary, and must include a boat numbering component, an education component and an enforcement component, as well as being in substantial conformity with the Model State Boat Act. Sec. 1475. Programs may include the acquisition of "facilities". Sec. 1478.

July 9, 1976
Summary of Federal Legislation re:
SHIPPING

4. Great Lakes
Pilotage Act of 1960
(46 USC 216)

Summary: Act provided for presidential proclamation "designating" certain waters of the Great Lakes. In waters of Great Lakes left undesignated by proclamation, sec. 216a(b) of Act requires that "registered vessels of the US" and foreign vessels have on board a registered U.S. or Canadian pilot or some "other officer qualified for the waters concerned." Pilots and "other officers", as that phrase is used in 216a(b), mean persons licensed by the U.S. Dept. of Transportation or certificated by Canadain authorities. (sec. 216)

Federal-State connections: Sec. 216g (a): "No State, municipal, or other local authority shall have any power to require the use of pilots or to regulate any aspect of pilotage in any of the waters specified in this chapter."

ARTICLE X

F. STATUTORY BASIS FOR OTHER PLANNING

Summary of Federal Legislation

1. Regional Planning

The following Federal statutes make direct or indirect reference to regional planning bodies of the scale of NIRPC and MACOG.

(a) Demonstration Cities and Metropolitan Development Act of 1966[1]
(42 USC 3301 to 3356)

This Act makes the vital provision that, within metropolitan areas,[2] application for Federal assistance for waste treatment works, highways, water development and land conservation projects must be submitted for review "to any areawide agency which is designated to perform metropolitan or regional planning for the area within which the assistance is to be used." (42 USC 3334; sec. 204 of the Public Law. This section falls in subchapter II of the Act, "Planned Areawide Development.")

Comments and recommendations of the areawide agency regarding the project's compatibility with comprehensive planning developed for the metropolitan area are to accompany the application and be reviewed by the Federal agency receiving the application, "for the sole purpose of assisting it in determining whether the application is in accordance with the provisions of Federal law which govern the making of the loans or grants." (sec. 3334 (b)(1))

(b) Intergovernmental Cooperation Act of 1968[1]
(42 USC 4201 to 4244)

The Act requires generally that "to the maximum extent possible, consistent with national objectives, all Federal aid for development purposes shall be consistent with . . . state, regional, and local planning." (42 USC 4231 (c), sec. 401 in the Public Law) Moreover . . .

> "the systematic planning required by individual Federal programs (e.g., highway construction, open space) shall be coordinated with and, to the extent authorized by law, made part of comprehensive local and areawide development planning." (42 USC 4231 (e)

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[1]It was under the authority of the Demonstration Cities and Metropolitan Development Act (sec. 204, 42 USC 3344), the Intergovernmental Cooperation Act (subchapter IV, 42 USC 4231 to 4233), and the National Environmental Policy Act (sec. 102 (2)(C), 42 USC 4332) that the Office of Management and Budget promulgated Circular A-95, the working document that seeks coordination in the application for and approval of Federal funding for state and local projects. (Cf. 41 Fed. Reg. 2052 ff.)

[2]A "metropolitan area" is used in the Act to mean a standard metropolitan statistical area (SMSA) as established by the

(c) HUD 701 Comprehensive Planning
(40 USC 461)

Under this section planning grants are available to a variety of recipients, including areawide organizations in metropolitan areas charged with performing regional planning. (40 USC 461 (a) (a) (5))

(d) Housing and Community Development Act of 1974
(P.L. 93-383)

The Secretary of HUD is not to approve grants for various community development projects, including acquisition of blighted property, open space conservation, and provision of certain public facilities (sec. 105 (a) (1)), unless the applicant, among other things, "specifies both short- and long-term community development objectives which have been developed in accordance with areawide development planning." (sec. 104 (a) (1))

(e) Federal Highway Act
(23 USC 101 to 142)

The Secretary of Commerce is not to approve grants for highway projects in urban areas of more than 50,000 population "unless he finds that such projects are based on a continuing comprehensive transportation planning process carried on cooperatively by States and local communities. (23 USC 134; cf. also amendment to 23 USC 105 as set forth in the 1974 supplement to the 1970 edition of the USC.)

(f) Urban Mass Transportation Act

(49 USC 1601 to 1612)

The Secretary of Transportation is not to approve grants for urban mass transit projects unless he finds the projects to be part of a program established "for a unified or officially coordinated urban transportation system as a part of the comprehensively planned development of the urban area." (49 USC 1603)

Office of Management and Budget (OMB). In the Coastal Zone Study Area, Lake and Porter counties constitute an SMSA, the title of which is the Gary-Hammond-East Chicago, Indiana SMSA. (Standard Metropolitan Statistical Areas, prepared by the Bureau of the Budget, Executive Office of the President, 1967, p. 17. Note that the Bureau of the Budget is now the OMB.) La Porte county is not listed in this 1967 publication as falling within an SMSA.

(g) Public Works and Economic Development Act
(42 USC 3121 to 3226)

A 1974 amendment added section 3151a, which authorizes the Secretary of Commerce to make grants to a variety of recipients, including "sub-state planning . . . organizations," for "economic development planning." (Cf. 1974 Supplement to USC.) This planning is to determine project opportunities and formulate a development program. Note that these grants are not limited to Redevelopment Areas and Economic Development Districts as these terms are defined earlier in the Act. (Cf. 42 USC 3161, 3171.)

2. National Environmental Policy Act of 1969 (NEPA)
42 USC 4321 to 4347

The EIS requirement

The Act voiced the Congressional intent that decision making by Federal agencies take into account "presently unquantified environmental amenities and values," and concretized this intent by requiring that an environmental impact statement (EIS) be prepared in conjunction with proposals for "major Federal actions significantly affecting the quality of the human environment." (sec. 4332 (2) (C); sec. 102 (2) (C) in the Public Law) The EIS is to "accompany the proposal through the existing agency review processes (ibid.). The EIS requirement has generated a very large amount of litigation. Some of the points of dispute are the following.

1. What is the force of the NEPA?

In a landmark 1971 decision interpreting the NEPA, the Court of Appeals for the District of Columbia distinguished section 101's substantive requirements that the Federal Government use all practicable means to safeguard the environment (42 USC 4321) and section 102's procedural requirements with respect to EIS preparation, and then went on to hold that although an agency's substantive decisions under sec. 101 could "probably" not be reversed by the Courts, "section 102 of NEPA . . . creates judicially enforceable duties."[1] Calvert Cliffs Coordinating Committee v. U.S. [illegible]

2. Who may prepare the EIS?

The Second Circuit Court of Appeals had held that EIS preparation for a federally funded highway project could not be delegated to a state agency.[2] This decision brought federally funded highway projects in a three-state region to an almost total halt. In response to that decision Congress amended section 102 of the NEPA (section 4332 in the USC) to allow state agencies with "statewide jurisdiction" over the sort of project in question to prepare the appropriate EIS, subject to the guidance and evaluation of the Federal agency through whom the Federal funding is being administered. (42 USC 4332 (D) as added by P.L. 94-82, 12/9/75)

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[1] Calvert Cliffs Coordinating Committee v. U.S. AEC, 449 F. 2d 1109 (D.C. Cir., 1971) at 1115; emphasis added.

[2] Conservation Society of Southern Vermont v. Secretary of Transportation, 508 F.2d 927 (2nd Cir. 1974)

3. What are "major Federal actions"?

Environmental impact statements may be required for actions permitted or licensed by a Federal agency, even where actual Federal construction or funding is not involved,[3] and for actions where only an indirect environmental impact, such as approval of railroad rates for hauling recyclable materials, is at issue.[4]

However, state-financed projects, although part of a general program including other projects receiving Federal funding, may not require an NEPA environmental impact statement.[5] And Federal actions at several removes from any environmental impact, such as FTC issuance of guidelines regarding vertical mergers in the cement industry, will not be subjected to the EIS requirement.[6]

4. What attention must be paid to an EIS?

The Calvert Cliffs case, noted above, confronted AEC regulations providing that an EIS for a proposed nuclear project would be "received into evidence" (i.e., given active consideration) by the atomic safety and licensing board only on the condition that a party to the proceeding actually raises some environmental issue.[7] The Court rejected this conditional procedure and held that the NEPA appeared to "demand that environmental issues be considered at every important stage in the decision making process."[8]

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[3]Scientists' Institute for Public Information, Inc. v. AEC, 481 F.2d 1079 (, 1973).

[4]Aberdeen & Rockfish R.R. Co. v. SCRAP, 422 U.S. 289 (1975).

[5]Friends of the Earth, Inc. v. Coleman, 518 F.2d 323 (C.A. Cal, 1975).

[6]Gifford-Hill & Co. v. FTC, 389 F. Supp. 167 (D.C.D.C., 1974).

[7]Calvert Cliffs v. AEC at 117

[8]Ibid., at 1118

5. What is the scope of an EIS?

Individual projects are often part of a broader program, and the degree and quality of environmental assessment may differ as EIS's are required only for the specific projects or for the overall program. A recent decision in the D.C. Circuit Court extended the requirement for a "program EIS" by requiring this broad statement for the total range of Federal activities by which the coal resources of the Northern Great Plains are currently being developed.[9] The novel aspect of the case lay in the fact that the court handed down this requirement in spite of the claim of the three Federal Departments involved (Interior, Agriculture, and Army) that their issuance of various leases, rights-of-way, and construction permits to various individual companies was not part of any integrated plan or program.

However, one of the important Second Circuit decisions on which the Sierra case depended has since been reversed. In Conservation Society of Southern Vermont, Inc. v. Secretary of Transportation[10] the court had held that improvement of a 20-mile segment of a highway could not proceed until a program-EIS was prepared for the entire 280-mile length of the highway. However, when the case was remanded, the court reversed its requirement of a program-EIS, relying on the June, 1975 Supreme Court decision in Aberdeen and Rockfish R.R. Co. v. SCRAP.[11]

In the SCRAP case the Supreme Court had decided that, although an ICC proceeding on freight rates required preparation of an EIS for that particular proceeding, nevertheless approval of a percentage rate increase in that proceeding did not have to await preparation of a comprehensive EIS exploring the entire underlying rate structure on which the increase was to be superimposed.[12]

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[9] Sierra Club v. Morton, 514 F.2d 856 (D.C. Cir 1975).

[10] 508 F.2d 927 (2nd Cir. 1974)

[11] 422 US 289 (1975). The decision on remand is at 531 F. 2d 637 (2nd Cir 1976).

[12] 422 US 289, 322 to 324.

Summary of Federal Legislation

3. Planning by Department of Housing and Urban Development

(a) Comprehensive Planning

40 USC 461

This section authorizes the HUD secretary directly to make planning grants or indirectly to provide planning funding to a large variety of recipients including, among others, states, cities, counties, groups of adjacent communities, and development districts. 461(a) Recipients who meet certain planning and reporting requirements are eligible annually for a continuation of such grant money. 461(d)

Basic Planning requirements: Each plan shall contain:

A. a housing element, concerned with satisfying housing needs in the plan-area.

B. a land use element directed both towards controlling in general "where growth shall take place" in the plan area and towards handling the pattern and intensity of traditional (residential, commercial, industrial) activities and "other" activities.

Comprehensive Planning: In extending financial assistance, the Secretary may require assurance that recipients are moving towards a more comprehensive sort of planning (461(f)), which includes not only the basic elements listed above, but additional elements, among which are:

A. provision of public facilities and government services (transportation is specifically mentioned);

B. development and utilization of natural resources;

C. identification of employment, education, and health needs in the plan area;

D. coordination of all related plans formulated by state and local governments. 461(m)(4)

(b) Open Space Land
42 USC 1500

Summary: Authorizes the secretary of HUD to help state or local governments finance the acquisition and development of open space land in urban areas. (1500a(a) The condition of any such federal grant is that the proposed project be part of an officially coordinated open-space program, which in turn is consistent with the "comprehensively planned" development of the urban area. 1500 b. Once lands are acquired under 1500 (a), they may not later be converted to other uses without approval of the sectetary. 1500 (c)

(c) Planned Areawide Development
42 USC 1331

Summary: Authorizes secretary of HUD to make supplemental grants to State and local public bodies for "areawide development projects" (viz. certain public facilities projects already partially funded under federal acts--cf. 1338(2)), if those State or local bodies can demonstrate that areawide comprehensive planning is in effect and is playing a determinative role in the locating and scheduling of public facility projects. 1335

(d) The National Flood Insurance Act
42 USC 4001-4127

Coverage: The Act authorizes the Secretary of HUD to establish and carry out a "national flood insurance program" (4011(a)), the "operational responsibility" for which will preferably rest with the nation's insurance industry (4011(b)), but will, if necessary, rest directly with the Federal Government. 4071 Coverage would extend to losses incurred by certain sorts of property by reason of flood, mudslide (4121(b)), or shoreline erosion. 4001(g) (Cf. USC, 1974 supp.)

Land use implications: The flood insurance program provides two "conditional benefit" relationships, the net effect of which is to put the department of HUD in the position of establishing fairly detailed land-use parameters for flood plains.

A. Persons in flood hazard areas are to be denied any Federal "financial assistance for acquisition or construction purposes" unless the community in which such area is situated is participating in the National flood insurance program. 4106(a) Moreover, Federally insured or regulated banks are prohibited from making loans secured by real estate located in the hazard area if the community in which such area is situated is not participating in the flood insurance program.

B. But, before a community, state, or area can participate in the flood insurance program, it must give assurance that it will adopt land-use and control measures consistent with certain "criteria for land management" developed by the Secretary of HUD. 4012(c)(2) Such criteria are to be designed to encourage state and local measures that will constrict the development of flood-endangered land and guide proposed construction away therefrom. 4102(c)

(The above provisos also apply to situations where the hazard involved is mudslide or erosion, save to the extent the Secretary of HUD adopts regulations particular to such situations. 4121)

4. Summary of Federal Legislation
Water Resources Planning Act
42 U.S.C. 1962 to 1962(d)-14
(July 22, 1965)

Water Resources Council:

The Act established a Water Resources Council entrusted with an overview and review role in certain regional and river basin planning processes.

Overview Aspect:

The Council is to study the relations of regional plans to national water requirements, and the inter-related projects of Federal agencies. Sec. 1962a-1.

Basin Commissions and Plans:

The President may declare the establishment of Basin Commissions. 1962b(a). By Executive Order 11345 of April 20, 1967 (set out following section 1962b of the Act), President Johnson declared the establishment of the Great Lakes Basin Commission, with jurisdiction over that portion of the great lakes states which is drained by the Great Lakes. The Commission is of mixed state-federal composition, including a member from each of eight federal departments, a member from the Federal Power Commission, and a member from each of eight Great Lakes States including Indiana.

Within its proper area, a Basin Commission is empowered both to provide coordination for "Federal, State, inter-state, local and non-governmental plans" for the development of water and related land resources (Sec. 1962b (b) (1)), and to prepare and keep updated a "comprehensive . . . plan for federal, state, inter-state, local and non-governmental development of water and related resources." Sec. 1962b (b) (2).

The Governor of each state involved is given 90 days to comment on newly proposed or revised comprehensive basin plans. After this period, plans are submitted to the Council for review and recommendations, then to the President for review, and then to Congress. Sec. 1962a-3.

State Planning:

In addition to promoting basin planning, which tends to be of an inter-state character, the Act also authorized funds to assist individual states in developing "comprehensive water and related land resources plans." Sec. 1962c (a). Such plans were made subject to approval by the Water Resources Council and were to take into account "prospective demands for all purposes . . . affected by water and related land resources development . . ." Sec. 1962c-2.

Presidential Planning:

Under the Federal Water Pollution Control Act amendments of 1972 (P.L. 92-500), the President, "acting through the Water Resources Council," is to prepare a "Level B" plan under the Water Resources Planning Act for all basins in the United States." Such plans are to be completed by January 1, 1980. $200,000,000.00 is appropriated for such planning 33 U.S.C. 1289.

Summary of State Legislation

5. Regional Planning Commissions
(I.C. 18-7-1.1-3 to 18-7-1.1-9; 1973)

Formation

The Act states that a Regional Planning Commission (RPC) may be established at the concurrent request of the counties in a region. (18-7-1.1-2). Commission membership represents counties and incorporated cities and towns (18-7-1.1-4 (a)(1) and (2)). "Two-thirds of the Commission membership shall be elected officials." (18-7-1.1-4(a)(4)) The Commission is to appoint an executive director, who in turn may appoint staff. (18-7-1.1-6)

The Act provided for the reorganization of multi-county planning commissions (cf. 18-7-5.5-1 to 9) into RPC's. (18-7-1.1-9) Moreover, the Act repealed a 1967 Act entitled "Regional Planning Commissions in Regions Containing a Population of 500,000 to 650,000" and required any such RPC's to meet the requirements of the 1973 Act. (Cf. note after 18-7-1.1-9.) The combined population of Lake and Porter Counties in the 1960 census was 573,000.

Powers and Limitations

A. Although an RPC "shall act in an adversary (sic; should be "advisory") capacity only (18-7-1.1-5(a))," it may function, when requested, as a coordinating agency for programs of other public agencies. (ibid.)

B. An RPC may adopt a "regional comprehensive . . . plan . . . as its official recommendation for the development of the region." (18-7-1.1-5 (b))

C. An RPC may receive Federal funds. (18-7-1.1-5 (c))

D. An RPC is to act as the A-95 Clearinghouse. (18-7-1.1-5 (g))[1]

E. An RPC may enter into "cooperative arrangements" with adjacent political subdivisions in an adjoining state, but may not delegate any of its powers or duties. (18-7-1.1-5 (f))

County Exemption

Counties are given the power to exempt themselves from the provisions of an RPC plan. (18-7-1.1-5 (b) and 18-7-1.1-5 (i)) Two difficulties may be noted:

A. It is not clear from the Act what effect a county's exercise of this exempting power would have on the cities and towns contained within that county.

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[1]Cf. Circular A-95, Office of Management and Budget, as published at 41 Fed. Reg. 2052.

County Exemption (cont.)

B. A county's exercise of this exempting power, although a de facto repudiation of the RPC's comprehensive plan, would not appear to dispense the county from submitting its own applications for Federal aid to the RPC for A-95 review, even though such review is required to consider the compatibility of the application with the areawide comprehensive plan.[2]

Multi-State Waste Disposal

An RPC, created in accord with the Act, is specifically prohibited from implementing or proposing a program which includes "interstate waste water management." (18-7-1.1-5(a)) This prohibition is further particularized in an act of the same year which states that an RPC established in accordance with 18-7-1.1-1 to 9 shall not "in any way help implement any land disposal provisions of the Chicago-South End of Lake Michigan (C-S.E.L.M.) Waste-Water Study conducted by the Army Corps of Engineers, or any other similar study that would create a multi-state waste disposal system" (18-7-1.2-1)

[2]Cf. 42 USC 3334; OMB Circular A-95, I.2.a, I.3.a, and V.10 as published at 41 Fed Reg. 2052 ff.

6. Watershed Protection and
Flood Prevention
16 USC 1001-1009 (1954)

Introduction

The Act introduces the Department of Agriculture into the planning and financing of flood control measures, thus forming a triangle of mutual concerns between the Department of Agriculture and the other two bodies already involved with water projects, namely, the Corps of Engineers and the Department of the Interior.

The Kinds of Works Authorized

By the Act the Secretary of Agriculture is authorized to furnish financial and other assistance to "local organizations" for "works of improvement" in watershed areas. (sec. 1003) "Local organizations" include States, political subdivisions thereof, and special districts such as soil and water conservation districts. (sec. 1002) Works of improvement may be directed not only to agricultural purposes and to flood control, but also to recreation and fish and wildlife development. (cf. sec. 1004(2)(A)) Amendments of 1972 expanded the Act to include water quality management projects, especially those regulating stream flow by means of resevoir systems. (cf. sec. 1004 in the 1974 supplement of the 1970 edition of USC; cf. P.L. 92-419, Tit. II, sec. 201(d)-(f).)

Significance of Project Size

Different approval procedures are outlined for different magnitudes of projects.

1. Projects entailing a Federal contribution of less than $250,000 and involving no structures providing more than 2500 acre-feet of total capacity may apparently be given final authorization by the Secretary of Agriculture. (sec. 1005(3)) (An acre-foot is the volume of water needed to cover one acre to the depth of one foot.)

2. Projects on the far side of the measures indicated immediately above require committee approval in Congress. Within this class, projects involving large structures require approval of Public Works Committees in the House and Senate, while projects with smaller structures are referred to Agriculture Committees. (sec. 1002)

Significance of Project Size (cont.)

3. Massive projects (e.g., ones including single structures with more than 25,000 acre-feet of total capacity or involving watershed areas in excess of 250,000 acres) are not included within the authorization powers extended to the Secretary of Agriculture under this Act. (sec. 1002)

Relation of Project Type to "Recommendation" Requirements

Projects requiring Congressional approval must also be routed through one or more of four Federal agencies, to receive "views and recommendations," if appropriate interests are touched upon by the projects. These agencies are Interior, Army, HEW, [illegible], and the EPA. Such recommendations are to accompany the plan to Congress. (sec. 1005(4) of 1974 Supp. to USC)

State Review

The Secretary of Agriculture will apparently not act on project proposals if they are disapproved by the state agency "having supervisory responsibility over programs provided for in this chapter." (sec. 1003)

ARTICLE XI

FEDERAL AND STATE AGENCY JURISDICTIONS

A. LISTING:

1. Federal:

Advisory Council on Historic Preservation
Bureau of Land Management
Bureau of Outdoor Recreation
Coast Guard
Corps of Engineers
Council on Environmental Quality
Department of Engineers
Department of Agriculture
Department of Health, Education & Welfare
Department of Housing and Urban Development
Department of the Interior
Economic Development Administration
Energy Research & Development Administration
Environmental Protection Agency
Federal Engergy Aministration
Federal Maritime Commission
Federal Power Commission
Federal Property Council
Fish and Wildlife Service*
General Services Administration
Great Lakes River Basin Commission
Maritime Administration
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
National Park Service
Nuclear Regulatory Commission
Office of Management and Budget
Office of Pipeline Safety
U.S. Geological Survey
Water Resources Council

*A discussion of certain of these agencies has been presented in the summaries and comments concerning legislative topics, in Article X. Where there has been no prior presentation, a separate description follows in Part B.

2. State:

Air Pollution Control Board
Board of Health
Department of Natural Resources
Environmental Management Board
Public Service Commission
Recreational Development Commission
Stream Pollution Control Board

ARTICLE XI

B. FEDERAL AGENCIES

Summary of Federal Agencies

1. Coast Guard

The Coast Guard currently operates within the Department of Transportation. Some of the Coast Guard's many functions and authorities are listed below, in table form.

Statutory authorization	Regulations issued by Coast Guard	Coast Guard activity or power
33 USC 401	33 CFR 114-117	The Coast Guard regulates construction of "bridges and causeways in navigable waters, to the extent that questions of location and clearance are involved.
33 USC 499	" "	The CG regulates the operation of drawbridges.
33 USC 513	" "	The CG regulates the alteration of obstructive bridges.
	33 CFR 90	These CG safety regulations govern navigation of the Great Lakes.
33 USC 1224 Ports . . . Safety Act of 1972	33 CFR 160	The CG may exercize controls over vessel traffic at congested points or under hazardous circumstances.
46 USC 391a, and elsewhere	46 CFR 30-40 and elsewhere	The CG exercises extensive control over vessel design. 46 CFR 30-40, for example, are regulations for the design and equipping of tank vessels.
33 USC 1321 (j) (1) (C) and (D) FWCPA of 1972	33 CFR 155	These CG regulations govern vessel design and equipment for the purpose of preventing discharges of oil and other hazardous substances.
46 USC 1451 to 1489 Fed Boat Safety Act of 1971	33 CFR 173	These CG regulations govern the numbering of boats.
" "	33 CFR 181, 183	The CG may issue safety-related boat-design standards and may certify boats as being in compliance therewith.

Summary of Federal Agencies

2. Council on Environmental Quality (CEQ)

The CEQ was created by the National Environmental Policy Act of 1969 (42 USC 4332) and is part of the Executive Office of the President. It surveys all aspects of the nation's environmental effort, makes policy recommendations, and annually prepares an environmental quality report which is submitted by the President to Congress. The Council has prepared EIS guidelines (40 CFR 1500) and a National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 1510), the latter under sec. 311 of the Federal Water Pollution Control Act Amendments of 1972. (33 USC 1321)

Summary of Federal Agencies

3. United States Fish and Wildlife Service (USFWS)

The USFWS is a service in the Department of Interior. Some of its functions related to commercial fisheries were transferred to the NOAA's National Marine Fisheries Service by Reorganization plans #3 and 4 of 1970. (Cf. 35 Fed. Reg. 15623 ff.) The USFWS presently administers the following programs, among others.

Statutory Authority	Regulations	The Program
16 USC 777 to 777k	50 CFR 80	The USFWS aids states in the restoration of fisheries. (Cf. "Summary of Fed. Legislation: Fish Restoration and Management Projects.")
16 USC 688 dd to ee	50 CFR 25 to 34	The USFWS administers the National Wildlife Refuge System. (Cf. "Summary of Fed. Legislation.")
16 USC 1531 to 1543	50 CFR 17	The USFWS administers the Endangered Species Act of 1973. (Cf. "Summary of Federal Legislation.")
	50 CFR 70 to 71	The USFWS operates 100 National Fish Hatcheries. (U.S. Gvmt. Manual, 1975/76, p. 282)

4. National Oceanic and Atmospheric Administration (NOAA)

1970 Creation

The NOAA was created within the Department of Commerce by Reorganization Plas # 4 of 1970 to provide a unified approach to the understanding and development of atmospheric and marine resources.[1] Programs from several agencies were transferred into the NOAA including, among others:

A. programs of the Bureau of Commercial Fisheries of the Department of Interior, with the exception of activities related to the Great Lakes Fisheries Commission;[2]

B. the U.S. Lakes Survey of the Department of Army. This survey publishes navigation charts of the Great Lakes and conducts research on hydraulic and hydrologic phenomena of the Great Lakes' water.[3]

Summary of Present Functions

Present NOAA functions include operation of the National Weather Service, the National Ocean Survey, and the National Marine Fisheries Service, as well as implementation activities under the CZMA of 1972 (16 USC 1451 to 1464), the Marine Protection, Research and Sanctuaries Act of 1972 (16 USC 1431 to 1434), and the Endangered Species Act of 1973 (16 USC 1531 to 1543).[4]

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[1]Cf. 35 Fed. Reg. 15627 ff.

[2]Cf. "Summary of Federal Agencies: NMFS" and "Summaries of Federal Legislation: Great Lakes Fisheries Act of 1956."

[3]Cf. Message of the President, 7/9/1970, set out after 42 USC 4321, subtitle "Components of the NOAA."

[4]U.S. Government Manual 1975/76, p. 140.

Summary of Federal Agencies

5. National Marine Fisheries Service (NMFS)

The NMFS is a service within the NOAA, which in turn is in the Department of Commerce. It analyzes and assists the nation's fisheries in their commercial aspects, Two specific programs administered by the NMFS are presented in chart form below.

Statutory Authority	Regulations	The Program
16 USC 742c	50 CFR 250	The NMFS administers the Fisheries Loan Fund, which assists private sector acquisition of commercial fishing vessels and gear. (Cf. "Summary of Fed. Legislation: Fish and Wildlife Act of 1956.")
16 USC 779a-f	50 CFR 253.2	The NMFS administers the Commercial Fisheries Research and Development Act. (Cf. "Summary of Fed. Legislation.")

6. Federal Agencies and Jurisdictions
Federal Maritime Commission (FMC)
Maritime Administration (MA)

The Federal Maritime Commission exercises certain regulatory powers with respect to the rates and fairs of "common carriers by water." Reoganization Plan No. 7 of 1961, Sec. 103; set out as note after 46 U.S.C. 1111. Members of the Commission are appointed by the President. The Commission is not a part of any executive department. Sec. 101.

The Maritime Administration exercises functions with respect to the making, amending and terminating of subsidy contracts for the construction and reconditioning of vessels (and shipping facilities). Reorganization Plan No. 7, 1961, Sec. 202 (b) (1), set out as a note after 46 U.S.C. 1111; Reorganization Plan No. 21 of 1950, Sec. 105(1), set out as a note after 46 U.S.C. 1111. The Administration is in the Department of Commerce. Reorganization Plan No. 21 of 1950, Sec. 201.

Both the FMC and MA succeeded to certain powers of the Federal Maritime Board, abolished by Sec. 304 of Reorganization Plan No. 7 of 1961. The Board itself had succeeded to certain powers of the former United States Maritime Commission. Cf. Reorganization Plan No. 21 of 1950, Sec. 104 and 105.

STATE

ARTICLE X

C. STATE AGENCIES

Summary of State Agencies

1. Indiana Public Service Commission (PSC)
as affecting electric utilities

The Indiana PSC regulates electrical utilities as to rates, issuance of securities, and in other respects.[1] The PSC also grants licenses, permits, and franchises (all with the effect of "indeterminate permits") "to own, operate, manage, or control" the plant or equipment of public utilities. (I.C. 8-1-2-91 and 92)

However, this licensing authority apparently does not extend so far as to give the PSC direct authority over the siting and construction of power plants. Indiana responded in the negative to the following question in a 1972 Senate Committee survey: "Does your state agency have authority to certificate construction?"[2]

(Note that in the case of nuclear powered generating facilities, construction and operation thereof expressly requires a permit from the Indiana Environmental Management Board. 13-7-9-1)

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[1]Cf. Public Service Commission Act of 1941, I.C. 8-1-1-1 to 8-1-1-13; Public Service Commission Act of 1913, I.C. 8-1-2-1 to 8-1-2-120, as well as regulations occurring between 54-201 and 54-401 of Burns Indiana Administrative Rules and Regulations.

[2]Included as an appendix in Journey, Power Plant Siting, 48 NOTRE DAME LAW REVIEW 273 at 307 (1972)

Summary of State Agencies

2. Recreational Development Commission (RDC)
(I.C. 14-3-12-1 to 24; added by Acts 1973, extensively revised by Acts of 1975)

Basic Function of the RDC

The RDC consists of five members (one of whom, ex officio, is the director of the DNR) and is a body both corporate and politic. (14-3-12-4) Its particular function is to handle the financing and construction of "park projects." This latter term apparently refers not to the development of new parks but to the enhancement of present parks, although some doubt is cast on the matter by the broad definition of "parks" to include "any lands suitable for public recreational facilities." (14-3-12-3(b) and (c)) (The Act does exclude from its scope, however, parks "of political subdivisions of the state.") "Park projects" include, for example, interior arterial systems and boating facilities. (14-3-12-3(c))

Specific powers

In furtherance of its basic function, the RDC is given the following powers, among others:

- power to acquire by purchase, lease (14-3-12-6), or eminent domain proceedings (14-3-12-7) the lands, easements, etc. necessary for the construction of park projects;
- power to provide for the issuance of park revenue bonds for the purpose of paying the costs of park projects (14-3-12-10);
- power to enter into contracts for the planning and construction of park projects (14-3-12-5(e) and (f).

Relation to DNR

The Act makes provision for, but does not require, the DNR to undertake the actual operation of park projects. The DNR and the RDC may enter into "agreements of use" with respect to such projects (14-3-12-4.5, 14-3-12-9), whereby the DNR pays the RDC a "rent" (cf. 14-3-12-19 for the term "rent") on the project sufficient for maintenance and repairs and for payment of interest on and eventual retirement of the debentures by which the project was financed. (14-3-12-9) The DNR apparently acquires funds for the payment of this rent from revenues deriving from the projects themselves (cf. the next to last sentence of 14-3-12-9) and through special surcharges on admission fees and boat-related fees. (14-3-12-19) "The use of any improvements covered by such agreements and the sites thereof shall, at the end of the term of such agreement . . . revert to the DNR." (14-3-12-9)

ARTICLE XII

EMINENT DOMAIN

A. FEDERAL POWERS:

1. Generally:

The general condemnation power is granted in 40 U.S.C. §257, which provides:

> "In every case in which . . . any . . . officer of the government has been, or hereafter shall be, authorized to procure real estate. . . for . . . public uses, he may acquire the same for the United States by condemnation, under judicial process, whenever in his opinion it is necessary or advantageous to the government to do so. . ." 40 U.S.C. §257.

Whenever any officer of the government seeks to acquire land or easement or right-of-way in land for public use, before judgment, he may file a "declaration of taking", declaring that said lands are thereby taken for the use of the United States. The declaration must contain a statement of the authority under which and the public use for which the lands are taken, a description of the lands, a statement of the estate or interest to be taken, a plan, and a statement of the sum of money estimated to be just compensation. Upon a filing of said declaration of taking and of the deposit in the court, title to the lands shall vest in the United States, and the land shall be deemed to be condemned and taken, leaving

only the final determination of just compenation to be made by the court. 40 U.S.C §258a.

In connection with a 1971 act of the Congress concerning uniform relocation assistance, the Congress also adopted a uniform real property acquisition policy. 42 U.S.C. §4651. Under another section of the same act, it was stated that the provisions of this uniform real property acquisition policy created no rights or liabilities and was not to affect the validity of any property acquired by purchase or condemnation. In addition, nothing under its provisions was to be construed as creating in any condemnation proceeding, any element of value or of damage not in existence prior to its enactment. 42 U.S.C. §4602.

The uniform real property acquisition policy set forth the following guidelines which were to be followed to the greatest extent practicable.

1. Every reasonable effort to expeditiously acquire the real property by negotiation should be persued.

2. The real estate should be appraised before negotiations, and the owner given an opportunity to accompany the appraiser and to see the appraisal.

3. Before negotiations, the officer shall establish an amount which he believes to be just compensation and shall make a prompt offer for the full amount so established; and in no event should such amount be less that the agency's approved appraisal of the fair market value.

4. To the extent practicable, no owner should be requested to move without at least 90

days written notice.

5. If the acquisition of only a part of the property would leave the owner with an uneconomic remnant, an offer should be made to acquire the entire property.

2. Navigation Purposes:

In connection with public works for the improvement of rivers and harbors, the Secretary of the Army is given specific authority to acquire land, right-of-way or material by condemnation. 33 U.S.C. §591. The Secretary may institute condemnation proceedings to acquire lands or easements needed by private or municipal persons in connection with river and harbor improvement works; and likewise for any state, or any reclamation of flood control or drainage district who need to secure land or easements in connection with river and harbor improvements. 33 U.S.C. §592, 593.

There are other specific provisions relating to condemnation in this area including a provision that where a part only of any land is taken, the just compensation awarded or the damages assessed to the owner shall take into consideration by way of reducing the compensation or damages any special and direct benefits to the remainder arising from the improvement. 33 U.S.C. §595.

In this legislation, the land to be taken must be "needed" for the river and harbor improvement. Under the general condemnation act, 40 U.S.C. §275, the finding by the officer seeking to take the real estate is that such

land is "necessary or advantageous" to the government.

Each of these acts were originally enacted in 1888. In 1923, the Supreme Court of the United States determined that the general condemnation act, 40 U.S.C. §257, was available to the Secretary of the Army for navigation purposes, remarking only that the specific eminent domain act authorizing the Secretary of the Army did not operate to limit the effect of the general act of condemnation. Albert Hanson Lumber Co. v. U.S., 261 U.S. 581 (1923). In 1940, a New Hampshire District Court held that the Secretary of the Army could proceed under either 33 U.S.C. §591 or 40 U.S.C. §259. U.S. v. 137.82 Acres of Land in Chesire County, 31 F. Supp. 723 (N.H. 1940). In 1943, a Texas District Court held, without elaboration, that the special act, 33 U.S.C. §591, was superceded by the general condemnation act, 40 U.S.C. §257. U.S. v. 2877.37 Acres of Land in Harris County, Texas, 50 F. Supp. 545 (S.D. Tex. 1943)

3. Park Purposes - Indiana Dunes National Lakeshore:

Within the boundaries of the Indiana Dunes National Lakeshore, the Secretary of the Interior is authorized to acquire lands, waters and other property, or any interest therein, by donation, purchase, exchange or otherwise. 16 U.S.C. §460u-1.

Implicit in this grant of authority, is the exercise of the power of condemnation. However, in a subsequent section, 16 U.S.C. §460u-3, the Secretary's authority to

acquire property by condemnation is suspended with respect to certain improved property used for one-family residential purposes, with certain other limitations and conditions. In addition, the act provides that the Indiana Dunes State Park may be acquired only by donation of the State of Indiana. 16 U.S.C. §460u-1.

B. STATE AND LOCAL CONDEMNATION POWERS:

1. General Eminent Domain Act:

The general eminent domain procedures are set forth in I.C. 32-11-1-1 et seq. It provides that any person, corporation or other body having a right to exercise the power of eminent domain for any public use, under any statute, existing or hereafter passed, and desiring to exercise such power, shall do so in the manner provided by this act.

It further provides that before proceeding to condemn, the body seeking the property may enter upon it for the purpose of examining and surveying it, and it shall make an effort to purchase the land easement or interest.

If the body seeking the land cannot agree with the owner with respect to the damages sustained by him, a complaint for condemnation may be filed in the county in which the land or other property right is situated. I.C. 32-11-1-2.

After notice according to the act, and the court being satisfied that the moving party has the right to exercise the power of eminent domain for the use it seeks,

disinterested appraisers are named to assess the damages, or the benefits and damages, as the case may be, and to make a return. I.C. 32-11-1-4.

Any party to the action, aggrieved by the asessment of damages, or of benefits and damages, may file exceptions, and a trial on the matter of such damages, or damages and benefits, is then had. I.C. 32-11-1-8.

The moving party shall have the right to take possession of the lands so appropriated only upon payment to the court of the amount of the award of the appraisers. All other proceedings may then continue with respect to damages, or damages and benefits. I.C. 32-11-1-7. If the moving party fails to pay the damages assessed within one year after the appraisers' report, and no exceptions are filed, or if exceptions are filed and it shall fail to pay the damages assessed upon final judgment (or upon final action on appeal) or shall fail to take possession of lands on which it has acquired less than fee simple title such as easements, and adapted it to the use for which it was appropriated within five years after the payment of the award or judgment, then such moving party seeking such appropriation shall forfeit all rights in and to the real estate or other property as fully and as completely as though no such appropriation or condemnation had been begun or made. I.C. 32-11-1-11.

Any person having an interest in his land which was taken for any public use without having first been appropriated

may proceed to have his damages assessed under the provisions of this general eminent domain act. I.C. 32-11-1-12.

2. Special Provisions:

Whenever the Governor of the State deems it necessary to acquire any real estate on which to construct any public buildings for the State of Indiana or to acquire any real estate adjoining any of the lands of the State on which buildings have been erected, he may order the Attorney General to commence a condemnation action. I.C. 32-11-2-1, et seq.

Most units of government, in furtherance of their duties and powers, have the right of eminent domain which is exercised under the general powers set forth in I.C. 32-11-1-1. Some units exercise their right of eminent domain under specific powers and procedures granted to it by the General Assembly including airport authorities, parks and park districts and Indiana Port Commission. The State Highway Commission is granted the power to acquire title to rights and easements in lands as are needed or reasonably necessary for state highway location, construction and maintenance, including purchase of areas needed for weigh stations, rest areas, scenic easements and other areas necessary to cooperate with the federal government, or for railroad right-of-way when such need is connected with highway purposes. See: I.C. 8-13-5-12.

3. Administrative Proceedings:

For some purposes, there exists an administrative condemnation proceeding conducted by the board of public works of a city for the acquisition of real or personal property for the

use and benefit of the city or for public streets and alleys. I.C. 18-1-7-1, et seq. The final determination of assessment of damages and benefits by the board of public works is subject to judicial review to determine if the board acted within the scope of its powers, if its action was illegal, or if its action was arbitrary or capricious. See: Slentz v. City of Fort Wayne, 233 Ind. 226, 118 N.E.2d 484 (1954). There is some doubt as to whether this administrative condemnation proceeding may be exercised by towns. This administrative condemnation proceeding is not an exclusive procedure for cities, and any such city may in its discretion proceed and effect condemnation under I.C. 32-11-1-1 et seq., the general eminent domain statute.

C. PUBLIC UTILITIES:

Any corporation organized under the law of the State of Indiana and authorized to furnish, supply, transmit, transport or distribute electrical energy, gas, oil, petroleum, water, heat, steam, hydrolic power or communications by telegraph or telephone to the public, or to construct, maintain and operate turnpikes, toll bridges, canals, public landings, wharves, ferries, dams, acquiducts, street railways or inter-urban railways for the use of the public has the power to take, condemn and appropriate land or any interest therein for the purpose and objects for which it was created. I.C. 32-11-3-1. The procedure to be followed by such

public utilities or qauasi-public corporations is the general eminent domain statute.

For the purpose of storing gas in sub-surface strata or formations of the earth in Indiana, persons or corporations authorized to do business in this state and engaged in the business of transporting or distributing gas may condemn sub-surface strata or formations in lands, and necessary rights incident thereto for the use and occupation of these lands as underground gas storage reservoirs. I.C. 32-11-4-1 et seq. The procedure for such condemnation is the general eminent domain statute.

Inter-state utilities and common carriers regulated by the Inter-state Commerce Commission or the Federal Power Commission also have the right of eminent domain in furtherance of their corporate purposes.

ARTICLE XIII

SPECIFIC ISSUES

what are issues?

A. INDIANA DUNES STATE PARK:

The Indiana Dunes State Park lies along the south shore of Lake Michigan in Porter County from a point east of Dune Acres eastward to a point west of Beverly Shores. It was acquired by the State of Indiana under authority of an act of the General Assembly of 1923. I.C. 14-6-12-1 et seq.

The lands to be acquired were to extend for a distance of not more than three miles along the south shore of Lake Michigan, were to include a typical section of the Indiana Dunes country, and were to include an aggregate superficial area of not more than 2,000 acres.

Under the Federal Act in 1966 creating the Indiana Dunes National Lakeshore, a federal park, it was provided that the Indiana Dunes State park may be acquired only by donation from the State of Indiana, and the Secretary of the Interior was directed to negotiate with the State for the acquisition of that park. 16 U.S.C. §460u-1.

I.C. 4-21-8-1 gives the State of Indiana the power to consent to an acquisition by the United States of America, by purchase, gift or condemnation with adequate compensation, of such lands in the state as the United States desires to pur-

chase or acquire for wildlife preserves, forest preserves, fish hatcheries, or other agricultural, recreational or experimental uses.

The Attorney General, in an opinion to the Governor concerning disposition of the Indiana Dunes State Park, drew the following conclusions:

> 1. I.C. 4-21-8-1 et seq., does not automatically vest title to any property in the United States, and unless and until a deed is signed and executed, title remains in the State of Indiana. Further, there shall be no conveyance if such would be considered contrary to the best interests of the State.
>
> 2. The authority to carry out any conveyance under this section rests with the Governor of the state and not with the General Assembly;
>
> 3. The United States could exercise its power of condemnation for the purpose of acquiring the Indiana Dunes State Park only if such power were expressly granted to a department or agency for the specific purpose of acquiring this park, and the Attorney General noted that the federal act concerning the Indiana Dunes National Lakeshore does not provide such power. See: 1967 O.A.G. No. 2, page 2.

At present, the State of Indiana still owns and operates the Indiana Dunes State Park.

B. THE INDIANA DUNES NATIONAL LAKESHORE:

By an act of Congress in 1966, a proposed Indiana Dunes National Lakeshore was created and identified as an area within certain boundaries delineated on a map on file with the Director of the National Park Service, Department of the Interior. It was represented by a parcel east of the

Porter-Lake County line, and a larger portion beginning at a point east of Dune Acres and continuing eastward along the lakeshore in Porter County to the Michigan City, LaPorte County eastern boundary, except for the town of Dune Acres, the Indiana Dunes State Park and the town of Ogden Dunes. It contained certain out areas as well.

Established to preserve for the educational, inspirational and recreational use of the public of certain portions of the Indiana Dunes, the Secretary of the Interior was authorized to acquire lands, water and other property or interest therein by donation or by purchase. 16 U.S.C. §460u, §460u-1.

The power of the Secretary to acquire property for the lakeshore by condemnation was suspended with respect to all "improved property" located within the boundaries of the lakeshore during the times when an appropriate zoning agency has in force an approved valid zoning ordinance. "Improved property" was defined to mean a detached one-family dwelling constructed before January 4, 1965, together with so much of the land on which it is situated necessary for the enjoyment for non-commercial residential purposes. In no event was the amount of land in each individual case to be greater than three acres in area, and the Secretary could exclude from such amount of land only beach or waters together with so much of the land adjoining the beach or waters as was necessary for public access or public use.

16 U.S.C. §460u-3.

The Act places a duty upon the Secretary to issue regulations specifying standards for approval by him of zoning ordinances affecting property within the lakeshore. The Secretary shall approve any zoning ordinance or amendment thereto which conforms to the standards contained in his regulations. The standards are to include a prohibition against commercial or industrial use (other than that permitted by the Secretary), the promotion of the preservation and development of the lakeshore, including setback requirements and the like, and other provisions required by the State of Indiana. If the zoning ordinances contain any adverse provisions regarding preservation and development of the lakeshore or fail to have the effect of providing the Secretary with notice of any variance granted or exception made to the ordinance, then as to any improved property within that area controlled by such zoning ordinance, the Secretary's suspension of authority to acquire property by condemnation shall terminate. 16 U.S.C. §460u-4.

The Act further allows an owner to sell his property to the United States and take back a right of use and occupancy for a term of years not to exceed twenty-five. It establishes an Indiana Dunes National Lakeshore Advisory Commission and prescribes for its membership. The Act specifically provides for the retention by the State of jurisdiction over police powers and taxing matters as follows:

> "Nothing . . . shall deprive the State of Indiana or any political subdivision thereof of its civil and criminal jurisdiction over persons found, acts performed, and offenses committed within the boundaries of the Indiana Dunes National Lakeshore or of its rights to tax persons, corporations, franchises, or other non-Federal property included therein." 16 U.S.C. §460u-8.

The Congressional intent is that the lakeshore shall be permanently reserved in its present state, and that no development or plan for the convenience of visitors shall be undertaken which would be incompatible with the preservation of the unique flora and fauna or the physiographic conditions now prevailing, but the Secretary may develop for appropriate public use such portions of the lakeshore as he deems especially adaptable including trails, observation points, exhibits and other areas for public enjoyment and understanding. 16 U.S.C. §460u-6.

At present, the Congress is considering an expansion of the Indiana Dunes Lakeshore, and the Indiana Dunes State Park remains in the control of the State of Indiana.

C. POWER PLANT CITING:

1. Existing Conditions:

Several power plant sites now exist along the Indiana shoreline. At the Indiana-Illinois state line, in Indiana, Commonwealth Edison has its Stateline Generating plant. Northern Indiana Public Service Company has its Mitchell Generating Station within the City limits of Gary, its Bailly Generating Station east of Burns Harbor in Porter County, and its Michigan City Generating Station at Michigan City, Indiana. All of these generating facilities are operated with fossile fuels, particularly coal and gas. In addition to the fossile generating stations at the Bailly site, Northern Indiana Public Service had received approval to construct a nuclear plant, which construction has been delayed for many years by litigation, discussed below. As noted before these public utilities have the power of eminent domain to carry out their duties of public service.

2. Bailly Nuclear Plant:

In 1970, Northern Indiana Public Service Company (NIPSCO) filed with the Atomic Energy Commission (now replaced by the Nuclear Regulatory Commission) an application for a con-

struction permit and operating license for a nuclear facility to be constructed on the company's Bailley site on the southern shore of Lake Michigan in Porter County, Indiana. The site consists of 350 acres in an L-shaped tract facing Lake Michigan immediately east of the Bethlehem Steel and Burns Harbor facilities and west of the National Lakeshore boundary and the Town of Ogden Dunes. The AEC, by action of its Atomic Safety and Licensing Board and Appeal Board authorized and affirmed the issuance of the construction permit in 1974. On appeal for review to the Court of Appeals of the 7th Circuit, the Court held the AEC decision to be unlawful and set it aside. The Court concluded that the AEC did not comply with its own applicable regulations and they were binding upon it Izaak Walton League v. AEC, et al., 515 F.2d 513 (7th Cir. 1975).

The Supreme Court of the United States granted certiorari, reversed the decision, and remanded it to the Court of Appeals for consideration of other contentions against the issuance of the construction permit not then decided. Northern Indiana Public Service Co. v. Izaak Walton League, 423 U.S. 12 (1975). The Supreme Court, contrary to the Court of Appeals interpretation, found that the AEC had correctly interpreted a definition of "population center distance" as one to be measured from the nuclear site to a demographic boundary, rather than to a political boundary. Upon such definition, the Bailly Nuclear Site was an acceptable

distance from such a center, as required by the regulations.

Upon remand to the 7th Circuit, the Court of Appeals held the AEC's order valid and denied the petition for review. 533 F.2d 1011 (7th Cir. 1976). The Court considered and rejected, as being without merit, the petitioners' arguments that the AEC failed to give sufficient weight to the density of population surrounding the Bailly site, failed to comply with the requirements of the National Environmental Policy Act, failed to give adequate consideration to alternate sites, and failed to properly evaluate cost-benefit analysis.

The more significant issue determined by the Court of Appeals was the threshold problem of the jurisdictional dispute between the Atomic Energy Commission on the one hand and the Department of the Interior on the other. The petitioners argued that the Bailly plant would encroach on adjacent Federal lands administered by the Department of Interior, in this instance the Indiana Dunes National Lakeshore which abutted the property on which the plant was to be constructed. The petitioners claimed that where the United States, through its Department of Interior, is entitled to equitable relief against the use of privately owned property which is detrimental to adjoining government property, the AEC approval is barred. The court first noted that the Department of Interior had not advanced such a contention. Second, the court said:

> "While AEC's authority to issue licenses and construction permits should be reconciled to the fullest extent possible with the interest of the Department of Interior in protecting the National Lakeshore, nothing in the authorizing legislation for either agency suggests that the Department's views on the advisability of an adjoining nuclear facility are to be controlling. AEC has considered the Department's comments, and has given attention to the environmental effects of the Bailly plant upon the National Lakeshore, as the law requires. It has concluded that with the restrictions and control it will impose as conditions to approval of the construction permit, . . . the environmental impact of construction and operation of the nuclear plant will not be substantial enough to require disapproval of the site. This was a determination the agency had authority to make." Izaak Walton League v. AEC, supra, (7th Cir. 1976).

Anticipating the drawing of an inference that the Department of the Interior could not seek such equitable relief, the Court answered a related argument by intervenor State of Illinois contending that extension of the exclusion area surrounding the site into the National Lakeshore is incompatible with the Interior's mandate to preserve the Indiana Dunes, by stating:

> "The exclusion area, however, will not extend into the lakeshore area."

(Ed. note: from this 1976 decision of the 7th Circuit, the petitioners filed a petition for certiorari with the Supreme Court of the United States, which petition was denied on November 8, 1976.)

3. Future Siting of Power Plants:

Northern Indiana Public Service Company supplies

the electrical power needs in Northern Indiana, a service area comprising 12,000 square miles and containing a population of over 2,000,000. Although service is supplied to consumers in 21 counties, the substantial supply load is concentrated in the heavy industrial area of East Chicago, Whiting, Hammond and Gary.

The final detailed environmental statement issued by the United States Atomic Energy Commission in February, 1973 contained a projection of future power needs in the area served by NIPSCO.

The projected peak load requirements would more than double in the decade of the 1970s. With the increased generating capacity from the Bailly Nuclear Station, internal generating capacity, and some purchases from neighboring utilities, would be sufficient to meet the peak demand with the desired percentage of reserve. Without the Bailly Nuclear Station on line, reserve power would be minimal. The AEC affirmed the finding of the Federal Power Commission that dependence on the alternative of purchased power is not desirable for NIPSCO in its place among the inter-connection network of electrical power systems operating within the east-central area of the United States.

The Bailly Nuclear Station, once constructed, will not go on line until sometime in the early 1980s. The extended litigation has created two major cost additions to the nuclear plant; one, the cost of litigation itself and two,

the multi-fold increased cost of construction. The environmental considerations are equally significant away from the shoreline as they are at the shoreline, particularly where a discharge is required into a watercourse. The ecological disturbances may be greater where the discharge is into a small body of water as opposed to a large body such a Lake Michigan.

The totality of these matters brings into sharp focus the battle lines drawn between the nation's need for energy resources and the nation's need for protection of its environment.

After reorganization of the Atomic Energy Commission, the Nuclear Regulatory Commission was specifically authorized to make and keep updated a national survey of possible "nuclear energy center sites" in cooperation with other interested federal, state and local agencies. 42 U.S.C. §5847(a). The licensing of fossile power plants is reposed in the Federal Power Commission. 16 U.S.C. §797(e). In the future, it may be required that a pre-qualification of power plant sites be undertaken by federal and state agencies, rather than by the utility company itself. In this manner, the public interest with respect both to national defense and protection of the environment can be first weighed, considered and determined.

ARTICLE XIV

ANALYSIS AND CONCLUSION

> "Congress realizes the coastal ecology is endangered by poorly planned development."

So wrote Judge Kretzman in United States v. Holland. With due recognition to the dangers to the coastal zone from poorly planned water and land related developments, are current federal, state and local laws sufficient for coastal mangement under the act?

They would appear to be so with respect to water and water related activities. They would appear to be somewhat deficient and diffused with respect to land and land use activities.

The powers of the Department of Natural Resources of the State of Indiana and the powers exercised by federal and state agencies under the Water Pollution Control Act Amendments of 1972 appear to be a substantial base to manage water and water related activities in the coastal zone.

The authority to control land use, and in particular zoning, is exercised by local units of government such as cities, towns and counties under enabling statutes of the State. Along the coastal zone, the allowable uses range from heavy industrial to park and recreation. The uses now allowed by local units of government, which consider the needs of

industry, commerce, residential development and recreation, should further consider the short and long range consequences of these uses upon the coastal zone as ultimately defined.

If new or additional legislation is necessary to deal with land use as it relates to the state and national interest in managing, protecting and developing the coastal zone, certain preliminary policy decisions must be made. The boundaries of the coastal zone must be determined. A narrower definition may require less extensive management tools than would a broader definition. Whether local, regional or state bodies shall administer guidelines established for the coastal zone is another policy decision which must be determined. There appear to be sufficient existing governmental units to administer a common program.

Although there are various agencies and different governments who have powers and exercise authority in the area of the coastal zone, they appear to work cooperatively and harmoniously, each seeking to reduce the duplication of services where possible. Notwithstanding, additional data should be acquired through interviews with representatives of agencies and bureaus to determine existing institutional methods each has in dealing with areas of concern in the coastal zone.

The Great Lakes region is a basin and the action or inaction by sister states has an impact upon the program of the State of Indiana. A method for coordinating the programs

of the Great Lakes states and for adopting consistent legislation is important.

Additional legal research should seek to identify new techniques, both legislative and administrative, which will give full consideration to the ecological, cultural and aesthetic values in the coastal zone as well as the needs for economic development.

This report is intended to provide the coastal zone mangement team, its technical and advisory groups, and its principal planners with a fair exposure to the body of law relating to the coastal zone.

There is no conclusion to the report or to the process. The present law is dynamic in its application and interpretation. New law and new legal thought change points of view or points of impact almost day by day. The law, as it now exists or as it is developed, can be made to serve the needs and interests of coastal zone of Indiana.

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